SEPTEMBER 1950

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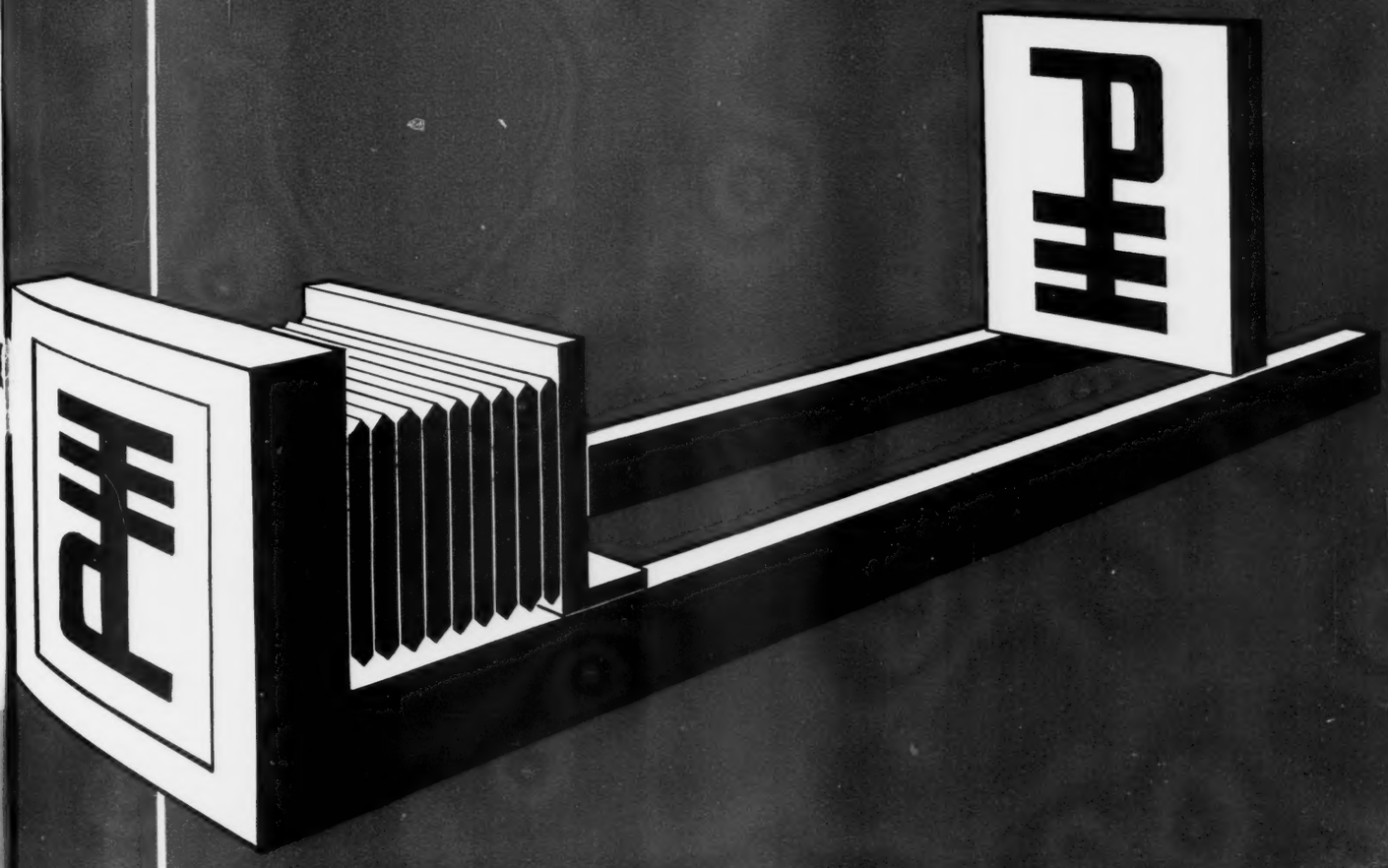

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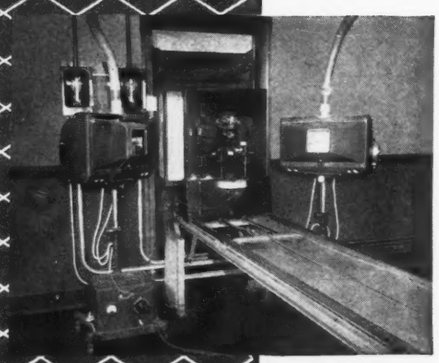
Cuts exposure time in half. Assures sharper prints. Freedom from dot undercutting is made possible by the single arc combined with the cross-over of the reflected light rays. Models available for both vertical and horizontal printing frames.



IN YOUR CAMERA GALLERY

Provides uniform illumination on work of any size. Extreme steadiness of light volume—constant color temperatures. Eliminates the illumination variable in the accurate control of densities. Has the power to punch through dense Kodachromes.

ON STEP AND REPEAT MACHINES

With precise control of intensity, accurate repeats become routine. Especially designed models for all photo-mechanical reproduction processes. Adapters to fit most cameras and photo-composing machines.

That's why 9 out of 10 motor-driven arc lamps used by the industry are Grafarcs.

★ RUGGED CONSTRUCTION. Oversize carriage slide bearings. Large ball bearing motor. Bakelite gears on hardened steel worms. Heavy gauge sheet metal and aluminum cast housing.

★ MODERN SILVERED GLASS REFLECTOR. The higher reflectivity of the silvered glass reflector compared to a metal reflector results in approximately twice the light per arc watt.

★ ARC STEADINESS. The result of using high intensity carbons in a draft-shielded horizontal trim.

★ NO VACUUM TUBES OR RELAYS. The current and voltage of the arc directly control the feed motor speed.

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Take advantage of a free trial without obligation to purchase. Because of the Grafarc's low current requirement, the present line supply wiring to your equipment is usually adequate.

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO-SEPTEMBER 11-23-1950

THE STRONG ELECTRIC CORPORATION

307 City Park Avenue — Toledo 2, Ohio

☐ I wish to take advantage of your FREE trial offer on Grafarc Lamps without obligation to purchase.

☐ Please send free literature and prices on Grafarc Lamps.

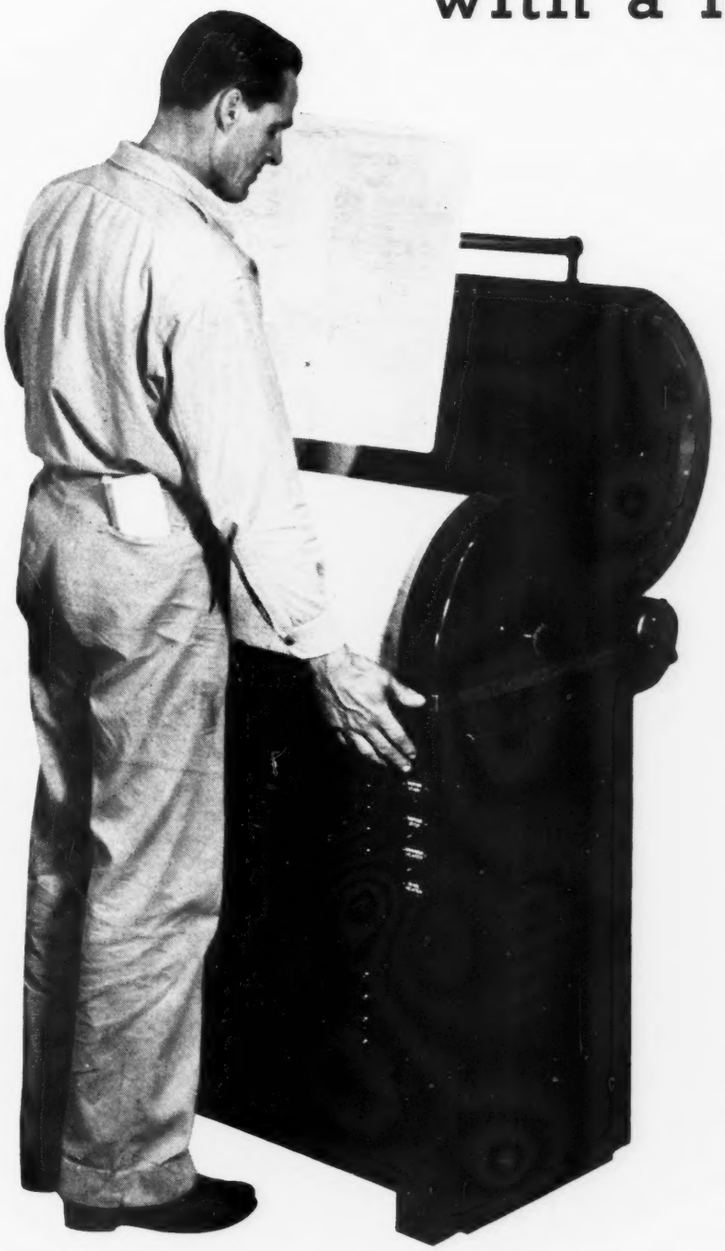
NAME.....

FIRM.....

STREET.....

CITY.....STATE.....

get more "mileage" from your newsprint with a master former!



- Perhaps you are finding it necessary these days to economize on your newsprint.
- Have you thought of using narrower rolls, thereby getting the same amount of printed "coverage" from a smaller tonnage of paper?
- It can be done by obtaining maximum shrinkage in your dry mats. Scores of newspapers are now employing this method of "paper stretching" by using Sta-Hi Master Formers to obtain this high shrinkage.
- Master Formers are enabling many newspapers to get shrinkages of from three-quarters of an inch to one inch, or slightly more!
- Figure how much valuable newsprint you would save in a year if you could slice just one-half inch from each roll used. It adds up to a sizeable amount, doesn't it?
- Let us tell you how the Master Former can help you realize such a saving—and at the same time give you a better printed newspaper at a lower production cost! Write for details.

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SUPERIOR NEWSPAPER PRODUCTION MACHINERY

STA-HI CORPORATION • 235 W. WASHINGTON BLVD. • WHITTIER, CALIF.

if it rolls...

Grip it with this NEW ELWELL-PARKER Handling Device

An exclusive advantage is the *adjustable* pressure control and ability to grip a roll short of the center line.

SEND FOR DATA
mentioning type and size of roll you handle.

Giants' hands couldn't be more dexterous or sturdy than this new attachment now available on Elwell-Parker Trucks. It's ideal for unloading or storing paper rolls and other materials in roll form, including ink drums, etc.

MASTER GRIP. This roll handler gets in between rolls. It holds a roll in a positive grip—so important in speeding action safely. Surfaces that contact the roll are rubber padded to protect the load. **REAR END CONTROL.** Facilitates alert inside car maneuvering, vision of roll without contortions, easy step-off in presence of danger, automatic power cut-off and brake application. Reduced weight. Lifts 1200 to 3500 pound rolls up to 17 feet.

NO PALLETS NEEDED. One user has saved 20% in storage space by eliminating pallets. Close, orderly stacking either vertically or horizontally and quick pick-up from stacks are accomplished with the attachment. The Elwell-Parker Electric Company, 4517 St. Clair Avenue, Cleveland 3, Ohio.

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at the Graphic Arts Exposition, Booth 339

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Bed Size.....32⅜" x 41¾"

Maximum Sheet.....28" x 41"

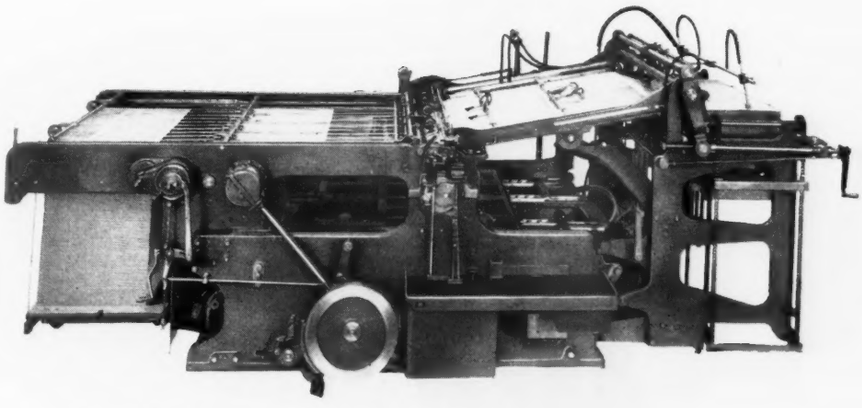
Maximum size form in chase.....28" x 38"

Stock handled.....Up to .036
(except in cases of unusual stiffness)

Range of operating speed.....2000 to 4000

miller

MILLER



28" x 41" CY Cutter and Creaser

The maximum running speed of this machine is 4,000 28 x 41 sheets per hour. Net production per running hour, even at a good average cruising speed, is 23% greater than any cylinder Cutter and Creaser of comparable size. Its capacity per hour is 75% of other Cutters almost three times its size.

This booklet die cut and embossed on the Miller Cutter and Creaser at a speed of 3500 per hour, fully describes this machine and will be sent to you without obligation upon your request.

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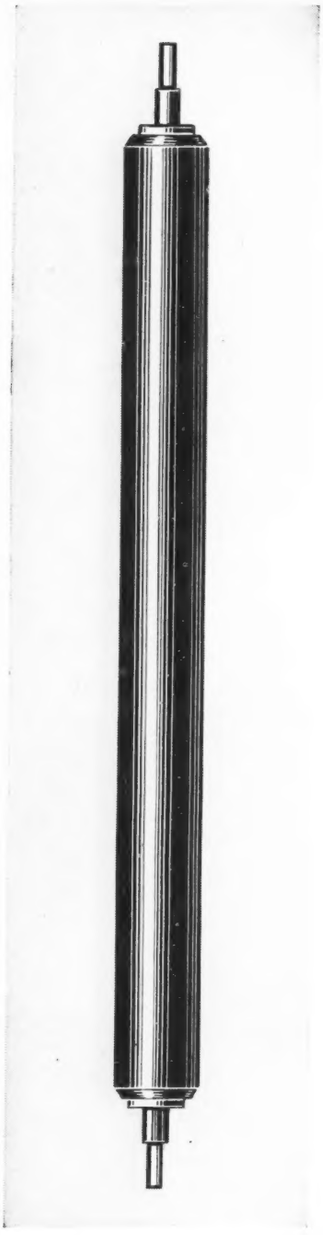

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GRAPHIC ARTS EXPOSITION
CHICAGO · SEPTEMBER 11-22-1950

PRINTING EQUIPMENT *Engineer*

AN INDUSTRY-WIDE TECHNICAL PUBLICATION

Published especially for management, production and mechanical executives responsible for printing production and the specification of equipment and supplies used in the commercial, magazine, private plant and daily newspaper fields.

SEPTEMBER 1950

Volume 80 **Number 6**

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Mechanism of the Linotype

By John S. Thompson

- **Machinist-Operators**
- **Machinists**
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Technical operating knowledge of the Linotype is available in this book which is in its 13th edition. It has been revised and amplified by Oscar R. Abel and Windsor A. Straw. Added has been information about late improvements in the machine. A practical and essential book for every composing room. Especially suited for the operator who wishes to learn the fundamentals of the care and adjustment of the machine.

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FREEDOM *from Web Breaks* WITH SCOTT PRESSES

THE NEW SCOTT PRINTED WEB CONTROL has reduced the number of interruptions from web breaks to the very minimum — those caused by hidden defects in the paper. Everywhere the new SCOTT Presses have shown a remarkable freedom from web breaks.

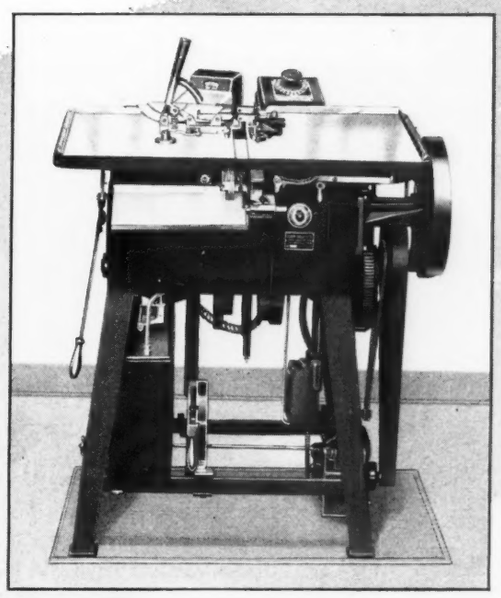
THIS NOT ONLY SAVES PRESSMEN arduous work leading webs through after breaks, but also increases the efficiency of operation and makes it easier for the pressroom to hold to its scheduled production.

MECHANICAL SUPERINTENDENTS and Pressroom Foremen who are operating new SCOTT Presses can confirm this remarkable achievement.

●

WALTER SCOTT & CO., INC.

PLAINFIELD, N. J.



The LUDLOW

Offers All These Advantages

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- Used effectively by competent compositors
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- Faster setting—matrix "gathering"
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- Long lines with single justification
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- Accurate slug-height reduces makeready
- Surfaced slugs for quality printing
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- Simplicity of mechanism and operation
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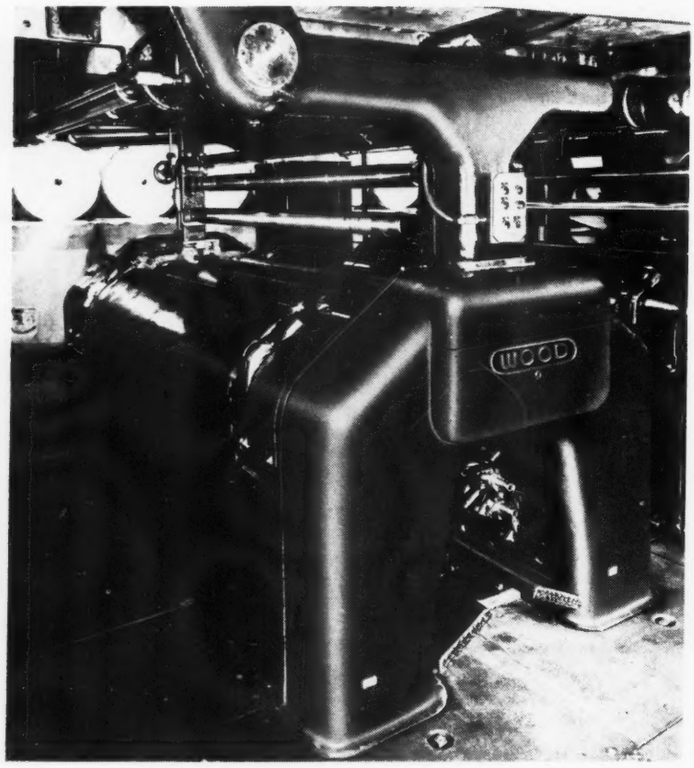
- Economy of floor space
- Low-cost PROFITABLE composition

The Elrod for leads, slugs, rule and base material in any quantity

Ludlow Typograph Company 2032 Clybourn Avenue, Chicago 14, Illinois

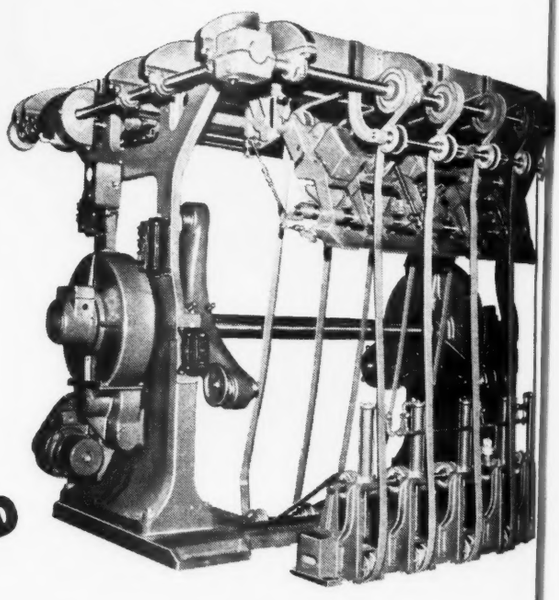
Set in members of the Ludlow Tempo family

Another WOOD PRESSROOM



These sturdy black press units are built to operate with minimum maintenance over a period of years. With the addition of these three units, the Post-Dispatch will have a total of 24 WOOD black units and 6 color units.

These WOOD standard Reels, Pasters and Te sions, to be installed under each new press un will keep production figures high by automatica feeding and replenishing webs at full speed, a by eliminating web breaks due to faulty tensi control.



IF IT'S Wood IT'S GOOD

INSTALLATION . . .

3 STANDARD BLACK PRESS UNITS WITH AUTOMATIC AUTOPASTERS...STANDARD REELS...PNEUMATIC TENSIONS

TO BE INSTALLED!

The increasing number of re-orders for WOOD equipment by such newspapers as the St. Louis Post-Dispatch is the highest recommendation to the publisher who plans to replace equipment, or to add to his present facilities.

Whatever the reason, you can be sure the purchase of any WOOD press equipment is a big step toward faster, more economical newspaper production . . . and a better looking newspaper.

ST. LOUIS POST-DISPATCH
FINAL
POLICE ORDERED TO CRACK DOWN ON CHURCH RAFFLES AND BINGO GAMES
'Teach-a-Phone' Graduate
FEDERAL COURT ILLINOIS AID BODY DENIES PLEA TO WARNS 4 AREAS ON BREAK UP ALCOA 'IRREGULARITIES.' HOLDS CASE OPEN THREATENS CUT
6 EUROPEAN NATIONS AGREE TO POOL COAL, STEEL OUTPUT UNDER SUPREME AUTHORITY
Magic Lantern Paints Picture Of Face From Verbal Description
DETAILS REMAIN TO BE IRONED OUT; BRITAIN DECLINES TO JOIN PLAN NOW
WEBWORMS INVADE CITY, IN ELM TREES, SOME SYCAMORES
LUTHER E. SMITH QUITS CWA SERVICE POST

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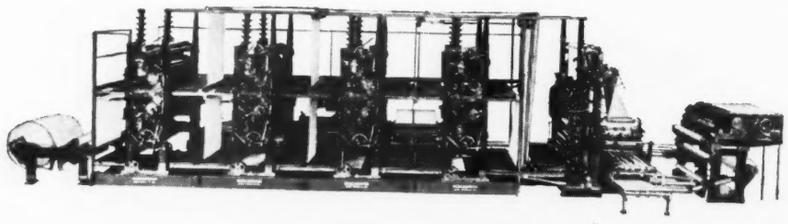
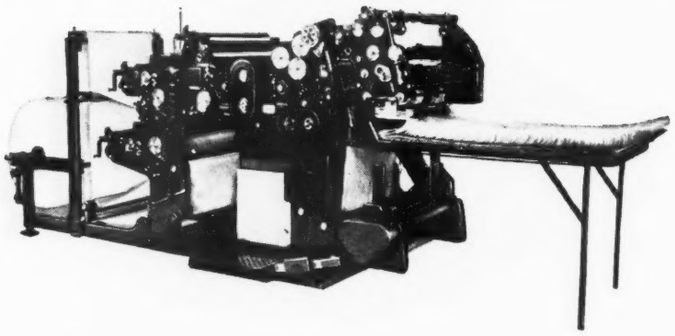


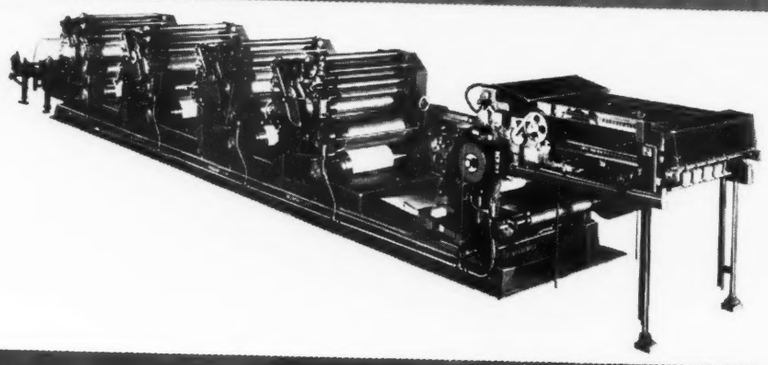
PUBLICATION PRESSES

The model illustrated here is a multicolor newspaper-magazine style web perfecting press for standard size newspapers, tabloids, shopping guides, magazines, comics, direct mail posters, wrappers, broadsides and digest-size booklets.



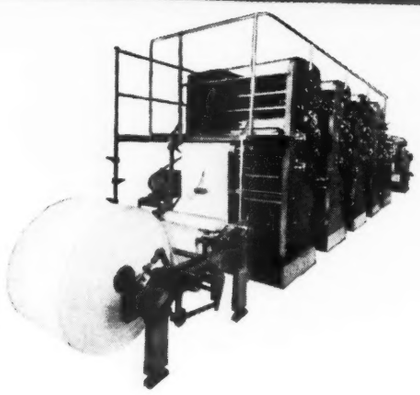
FORM PRESSES

These are high-speed web-fed presses for printing one-time carbon sets or continuous forms by offset or rubber and stereotype plates.



WEB COLOR PRESSES

This model delivers sheets or rewound rolls. Ideal for printing book jackets, post cards, box wraps, gift wraps, inserts and magazine covers, folders, broadsides, booklets.



SPECIALTY WEB PRESSES

The model illustrated here shows one of these presses built for printing desk calendars, pattern charts, place mats, instruction sheets, insurance policies and other special jobs.

THE *Greater Facilities* OF WEBENDORFER WEB-FED OFFSET PRESSES

- BOOK JACKETS
- BOX WRAPS
- LABELS
- GIFT WRAPS
- BROADSIDES
- MAPS
- FOLDERS
- PARTS BOOKS
- MAGAZINES
- NEWSPAPERS
- PHONE BOOKS
- MAGAZINE INSERTS

The tide is coming in! It's the trend! Offset's versatility in the production of printing, with the eye appeal demanded in these days of visual selling, is building up more and more volume.

And now web-fed offset brings you even greater versatility and lower production costs. Webendorfer web-fed offset presses and printing equipment offer these additional profit making facilities: printing on both sides in multicolor, folding, numbering, perforating, sheeting, and collating.

Are you being passed up by economy and delivery minded printing buyers for the lack of web equipment?

Why not look into this sound approach to future plant expansion? Ask for the illustrated brochure giving complete details of the four types of Webendorfer web-fed presses. One of these presses may be the ideal solution of your production requirement. Get ready to ride the tide. Write today.

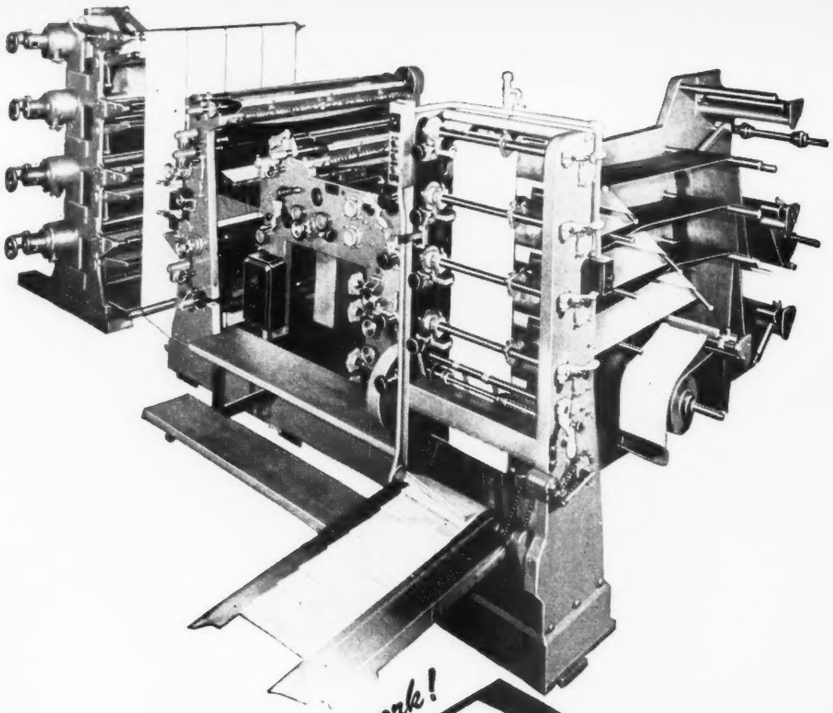
AMERICAN TYPE FOUNDERS

Webendorfer Division, 2 South Street, Mount Vernon, New York

ATF

Ask for your copy
of the brochure showing the ATF Webendorfer web-fed offset presses

Seventeen inch Hamilton Rotary Web Press. Arranged for printing two colors on face, or one color on face and one color on back, of four webs simultaneously. Performs file hole punching, cross perforating, length perforating, numbering, interleaving of carbon, glueing and cut-off delivery in the same operation. (This is **not** the press to be shown in action at the exposition.)



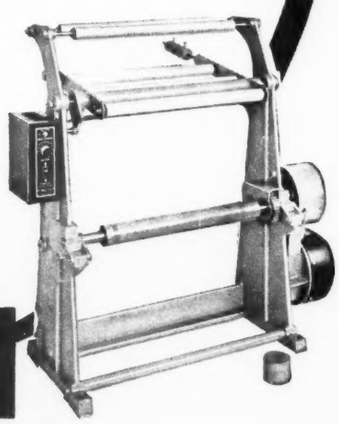
See it at work!

THE HAMILTON
ROTARY WEB PRESS
CONVERSATION TOPIC OF THE EXPOSITION

Now you can see one of the pace setting Hamilton Rotary Web Presses actually at work producing the very type of printed forms which comprise the bulk of your business; but doing it far faster and better than you have ever seen it done before.

BOOTH NOS. 141 and 143
GRAPHIC ARTS EXPOSITION
CHICAGO
SEPT. 11 - 23, 1950

Hamilton Magnetic Unitension Rewinder.



See, also, the unique Hamilton Magnetic Unitension Rewinder. The rewinder which many install to replace "standard equipment."

HAMILTON SPECIAL MACHINERY TO PRINT "ANYTHING ON ANYTHING"

THE *Hamilton* TOOL COMPANY
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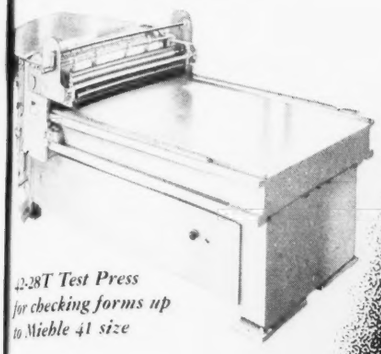
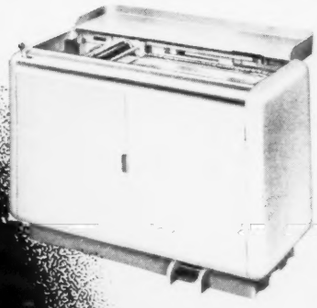
REDUCE YOUR COSTS . . . by increasing production

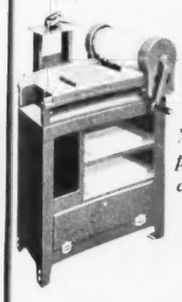
with faster, easier to operate, and trouble free Pre-Press Equipment



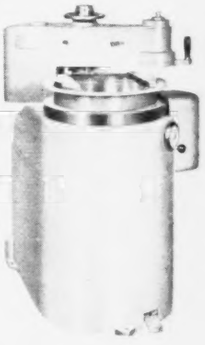
42-28T Test Press for checking forms up to Miehle 41 size



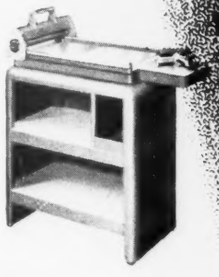
No. 23 . . . a safe, high speed, electric galley proof press with capacity up to 40 proofs per minute



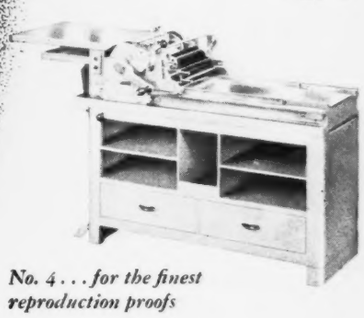
No. 1 . . . a hand proof press with cylinder gripper



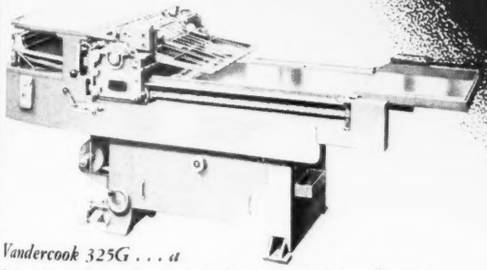
Vandercook No. 11 Block Leveller



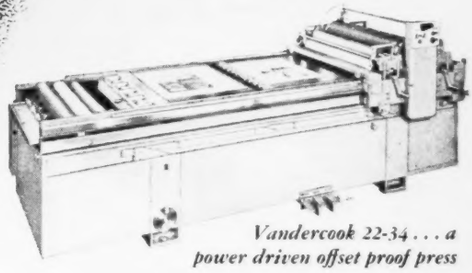
No. 0 . . . an inexpensive hand proof press



No. 4 . . . for the finest reproduction proofs

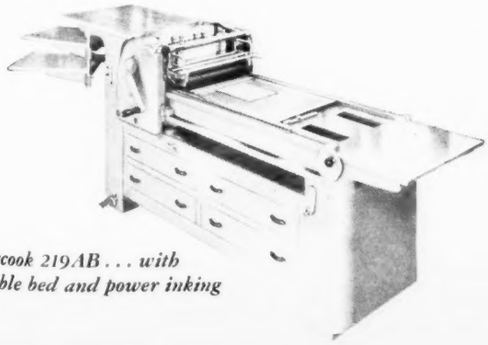


Vandercook 325G . . . a power press for volume proofs up to 1000 per hour

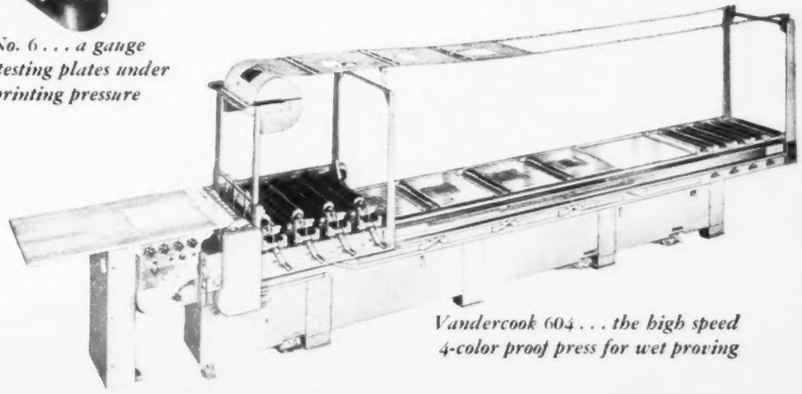


Vandercook 22-34 . . . a power driven offset proof press

No. 6 . . . a gauge for testing plates under printing pressure



Vandercook 219AB . . . with adjustable bed and power inking



Vandercook 604 . . . the high speed 4-color proof press for wet proving

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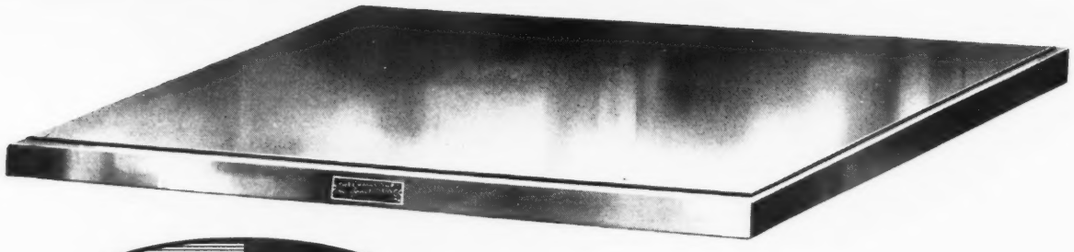

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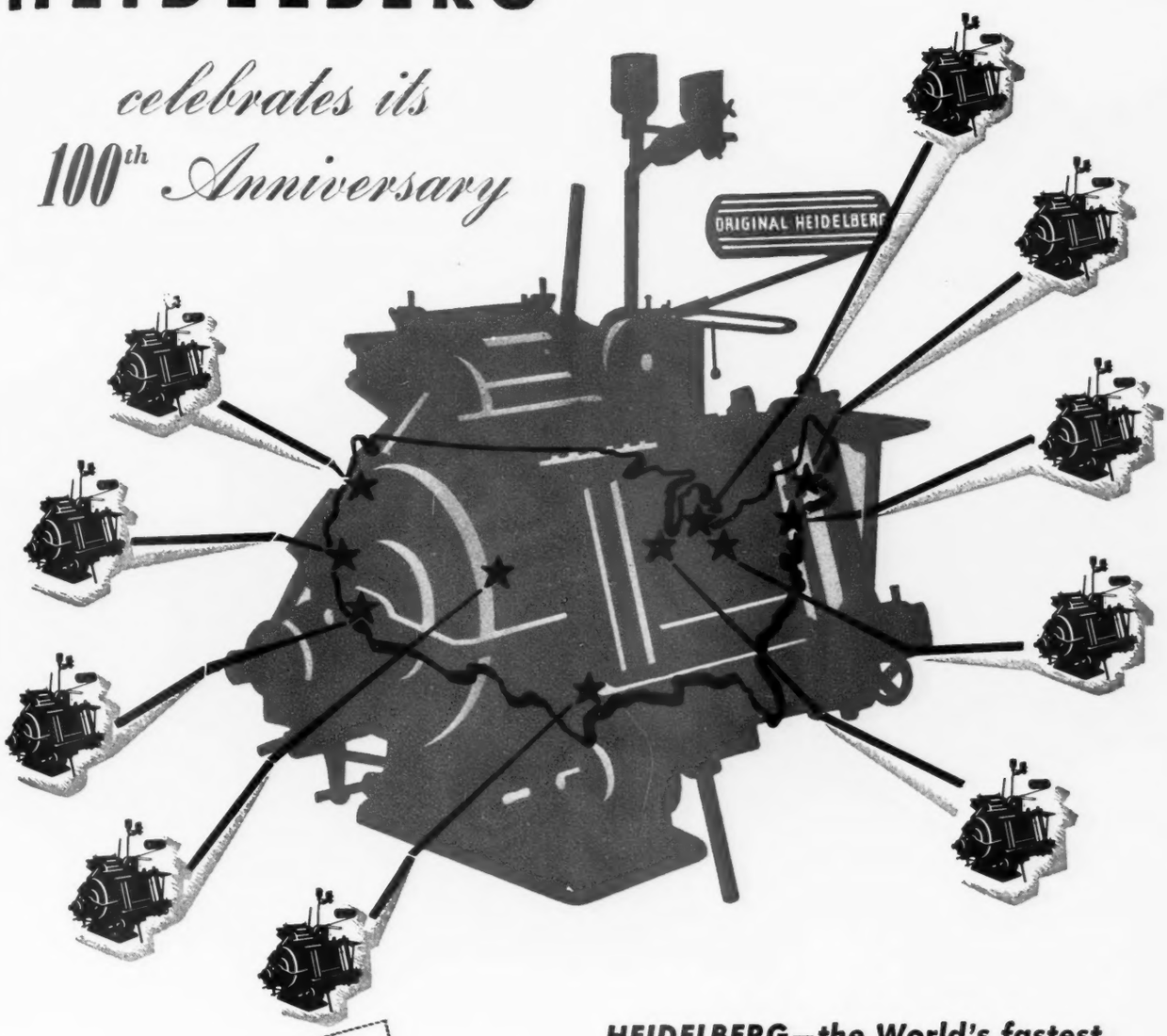

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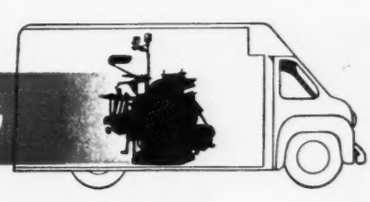

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BEFORE YOU BUY ANY ENGRAVING EQUIPMENT...

Whether you are planning to replace old equipment, add to existing facilities, or install a complete engraving department in your plant, it will pay you to use this test as a quick check.

LOOK FOR...

APPEARANCE:

Design should be simple, neat, functional. Exterior materials and finish ought to be attractive, durable, easy to *keep* looking good.

SPACE REQUIRED:

You need all the free floor space you can get. Don't let cumbersome, space wasting equipment rob your plant of "elbow room".

CONSTRUCTION:

You don't buy equipment every day. When you do, make sure it will last! Check for corrosion resistance, insulation, type and gauge of metals and wiring *inside* as well as outside. Get *all* the specifications on piping, heating elements, drainage. Compare with what you get in other makes.

CONVENIENCE:

Study the type and placement of controls, instruments and accessories. Check for automatic or semi-automatic features available with installation and later. Ease of operation means *less fatigue to operators, less time for preparation, more time for production.*

PRODUCTION VERSATILITY:

You may be busy now. You may be *twice* as busy soon! Will this equipment handle rush periods in stride? *What is its maximum capacity?*

PRODUCT QUALITY:

Be sure the equipment is *inherently capable* of producing high quality work without time consuming fussing by the operator. Trial and error methods mean waste of material and potential bottlenecks.

ECONOMY:

Initial cost is often the smallest cost! Look for features that save power, lower maintenance, lessen waste and minimize stoppages and tinkering.

SAFETY:

Safety to men and materials pays big dividends in peace of mind and in net production. Be certain every precaution to prevent injuries and waste is "built-in" the equipment you buy!

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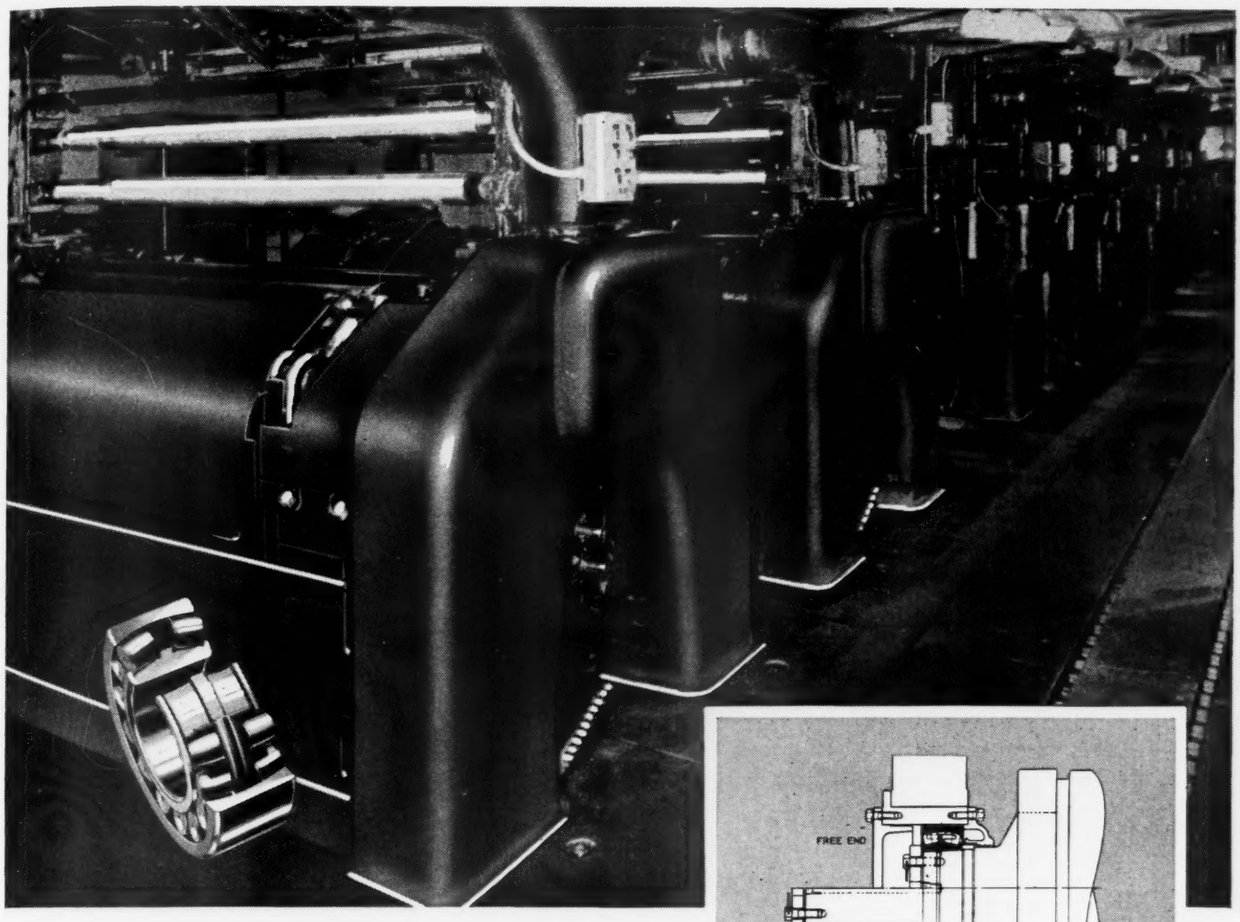

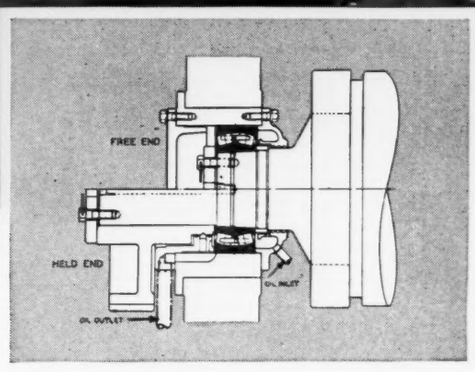

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with SKF bearings on WOOD presses

Wood Newspaper Machinery Corporation has been using SKF Bearings on their fine printing equipment for over twenty years. Like other builders of quality printing presses, Wood has found on this standard 16-page black unit that SKF meets the requirements for printing cylinder bearings with a "large bore and a relatively small outside diameter."

Preload is uniform, eliminating any need for adjustment if replacement is ever necessary.

Precision tolerances are applied to all important dimensions.

Removal is easy, thanks to SKF's system of hydraulic removal.

Design has been simplified to do away with need for an additional bearing to stabilize the cylinders or take gear thrust.

Operation is cool at all times, eliminating undue expansion in the eccentric boxes.

Add up these advantages. They're proof that SKF can always help put the right bearing in the right place. **SKF** INDUSTRIES, INC., PHILADELPHIA 32, PENNSYLVANIA—*the Pioneers of the Deep Groove Ball Bearing, Spherical Roller Bearing, Self-Aligning Ball Bearing.* 7153

SKF
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. . . these new Linotype developments

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- *the new MLCo. Quadder (for installation on practically all outstanding line-casting machines)*
- *the new LINOFILM, a Linotype photo-composing machine*

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Set in Spartan Black and Medium; Gothics No. 18 and 20

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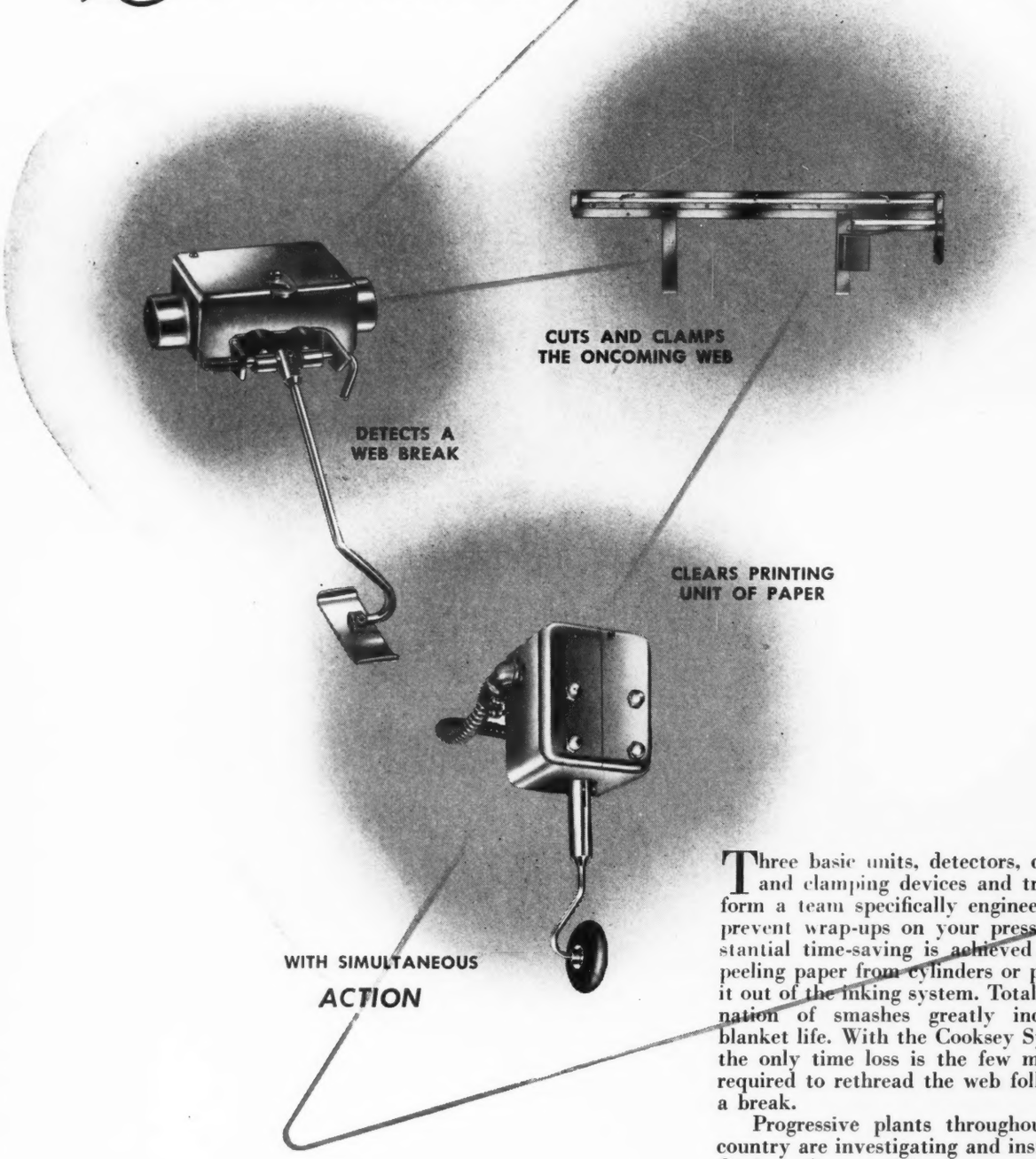

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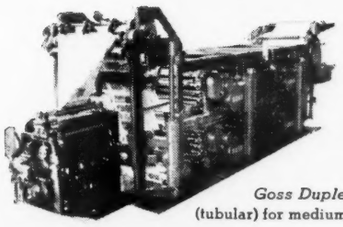
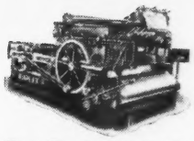
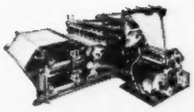
SALES AGENTS: Goss Printing Press Company, CHICAGO; R. Hoe & Company, Inc., NEW YORK CITY; Wood Newspaper Machinery Corp., NEW YORK CITY



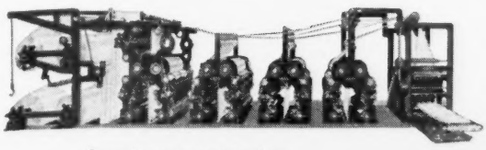
Goss Duplex Dek-A-Tube (tubular) for medium-size daily newspapers.



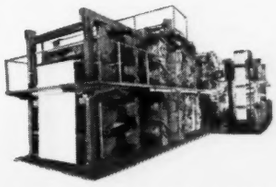
Goss Duplex Model E (flat-bed) for semi-weekly, small daily newspapers.



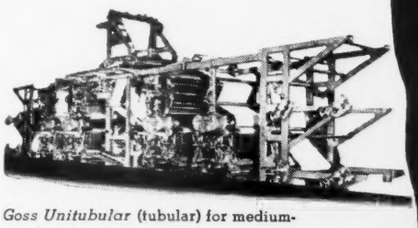
Goss Cox-O-Type (flat-bed) for weekly semi-weekly, small daily papers.



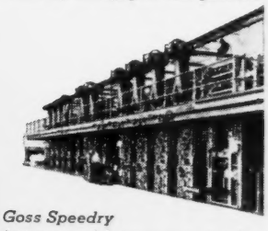
Goss Unitube (tubular) for medium-size dailies.



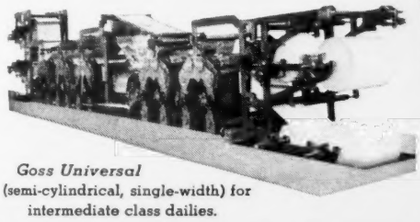
Goss Multi-Color (high speed) for color comic sections and supplements, etc. Used by newspapers and printers.



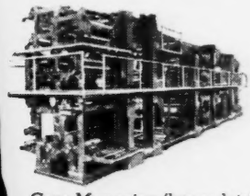
Goss Unitubular (tubular) for medium-size dailies and commercial printers.



Goss Speedry (rotogravure) for newspaper and commercial colorgravure work.



Goss Universal (semi-cylindrical, single-width) for intermediate class dailies.



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International Amphitheatre
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Imperial Vitalloy 160. Superior to Standard or Special Monotype, lower casting temperature, smoother face, greater solidity.

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The same durable coating as "COMBINO" affixed to a repressed felt blanket. For those who prefer a softer packing. Wool Felt also available uncoated in gauges .063 and .083.

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Highly resilient and recommended as the underpacking for "COMBINO" or in combination with "FOUNDATION" Blanket or "TINGU-CORK" where a drawsheet is used.

TINGUCORK*

Much firmer than "CUSHION CORK" and preferred where precision plates are available as a companion blanket for "CUSHION CORK", "FOUNDATION" or "COMBINO."

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Loses .006 to .008 during first 50,000 impressions and then holds at a constant level for the life of the blanket. Desirable for plants with older type presses, or, where an unfavorable mechanical condition exists.

FOUNDATION

A firm durable oilproof under packing laminated with "Neoprene" for use in combination with "CUSHION CORK", "TINGUCORK", and "TINGUE" Drawsheets or Felt.

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This drawsheet is firm, durable, economical and of long life.

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Coated with "Calvaprene" by DuPont, on a fabric which has been impregnated with "Neoprene."

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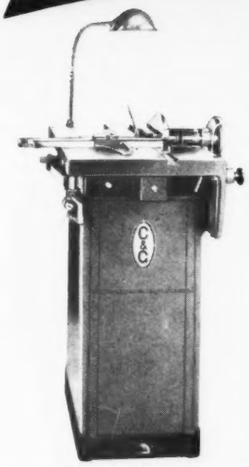
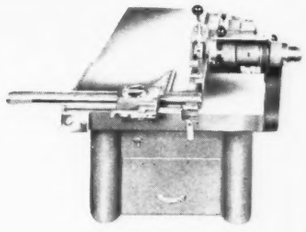


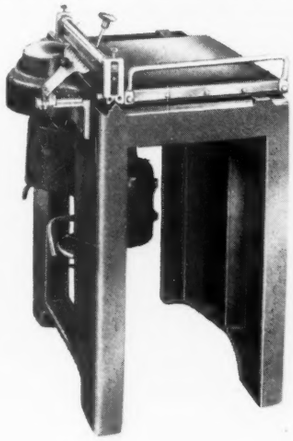
MORRISON MODEL 3-A SAW TRIMMER

Clamps the work behind the gauge for improved visibility, easier handling, and greater accuracy. A must for economy and efficiency minded composing rooms.



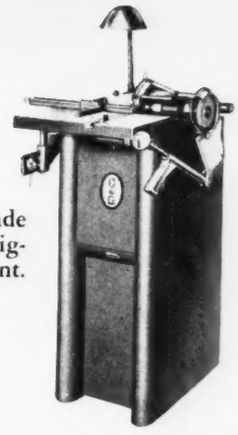
MORRISON MODEL "45" SPECIAL

Here's a low-cost saw trimmer that embodies most of the features of the higher priced Model "45" and Model 3-A, with many of the parts and attachments interchangeable. "Behind the gauge" work clamp is standard, but conventional "ahead of the gauge" clamp may be supplied as optional equipment. Also available in a cabinet model.



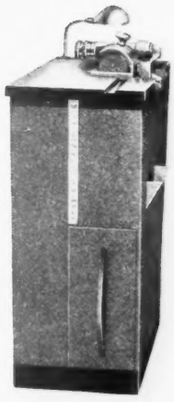
MORRISON PLATE BEVELER

Puts a perfect, burr-free shoulder or bevel on all plates. Cutters work from edge of plate, not the top. You get a smooth die-straight cut every time.



MORRISON MODEL 45 SAW TRIMMER

With pistol grip saw blade attachment. Features "Trigger Speed" saw adjustment.



MORRISON SLUG STRIPPER

"Proves itself to the men within 24 hours." Makes it easy to strip the face of any slug or type character to the exact thickness needed for base heights.

Other Morrison equipment, which will also be shown, includes: strip material cabinets, waste receptacles, Universal saw blades, router bits, and jigsaw blades.

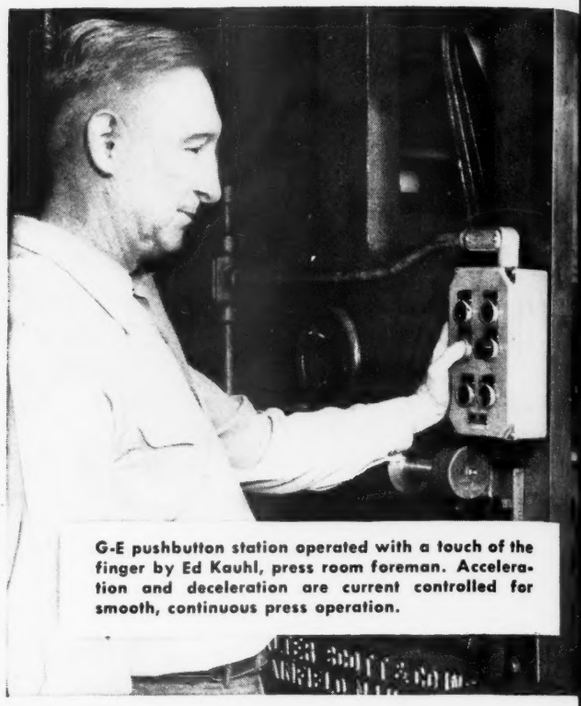
Symbol of Operating Economy

THE MORRISON COMPANY

PRECISION MACHINES FOR THE GRAPHIC ARTS INDUSTRY

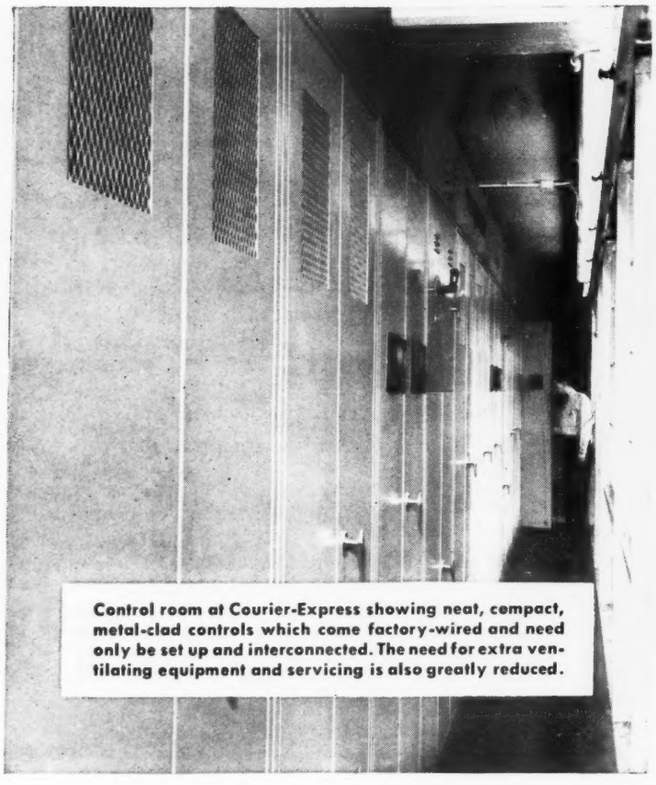
125 W. Melvina Street, Milwaukee 12, Wisconsin

BUFFALO COURIER-EXPRESS says:

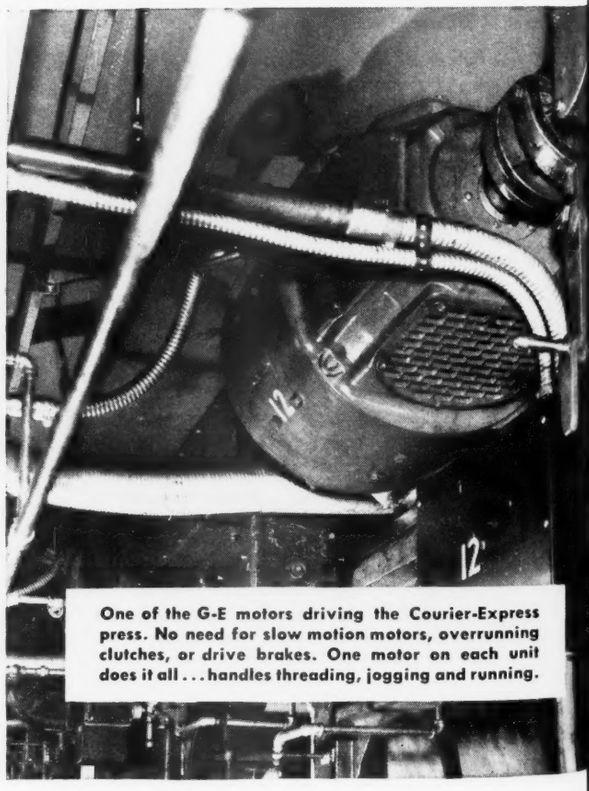


G-E pushbutton station operated with a touch of the finger by Ed Kauhl, press room foreman. Acceleration and deceleration are current controlled for smooth, continuous press operation.

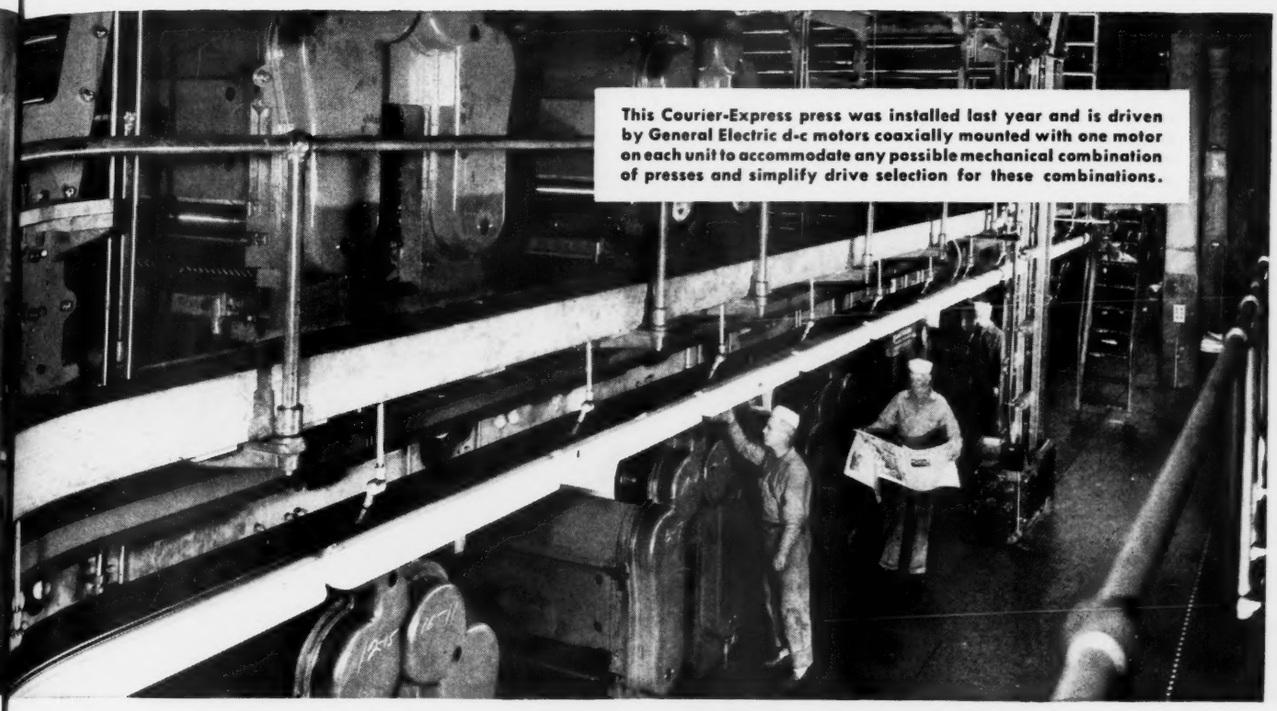
ELECTRONIC
gives 27%



Control room at Courier-Express showing neat, compact, metal-clad controls which come factory-wired and need only be set up and interconnected. The need for extra ventilating equipment and servicing is also greatly reduced.



One of the G-E motors driving the Courier-Express press. No need for slow motion motors, overrunning clutches, or drive brakes. One motor on each unit does it all . . . handles threading, jogging and running.



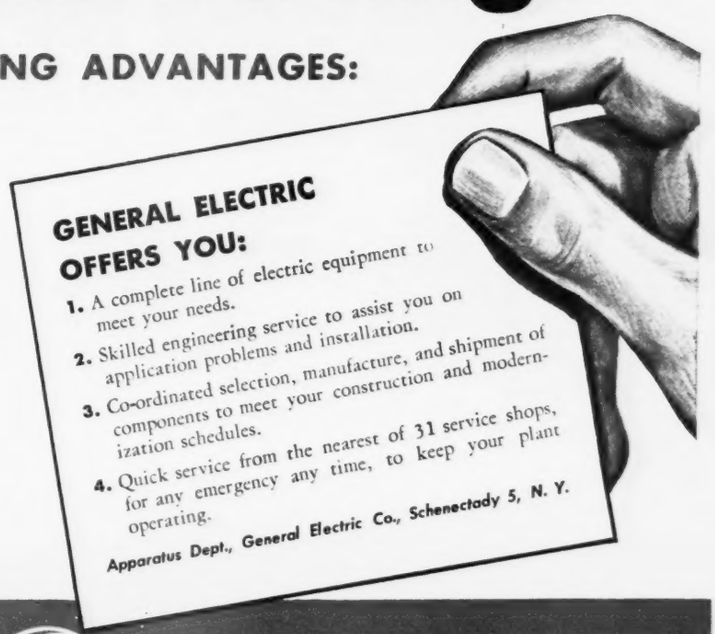
This Courier-Express press was installed last year and is driven by General Electric d-c motors coaxially mounted with one motor on each unit to accommodate any possible mechanical combination of presses and simplify drive selection for these combinations.

PRESS DRIVE

kw demand savings

OTHER OUTSTANDING ADVANTAGES:

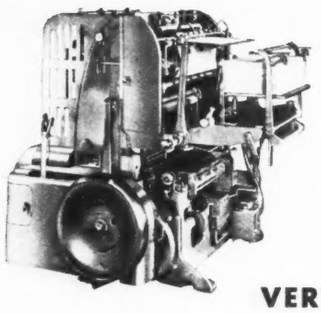
Increased Operating Flexibility
Minimum Speed Variation
Reduced Power Loss
First Real Stepless Speed Adjustment
Simplified Drive Installation
Easy, Economical Maintenance
Simplified Control Installation
Finger Tip Control Operation


GENERAL ELECTRIC
OFFERS YOU:
1. A complete line of electric equipment to meet your needs.
2. Skilled engineering service to assist you on application problems and installation.
3. Co-ordinated selection, manufacture, and shipment of components to meet your construction and modernization schedules.
4. Quick service from the nearest of 31 service shops, for any emergency any time, to keep your plant operating.
Apparatus Dept., General Electric Co., Schenectady 5, N. Y.

GENERAL ELECTRIC

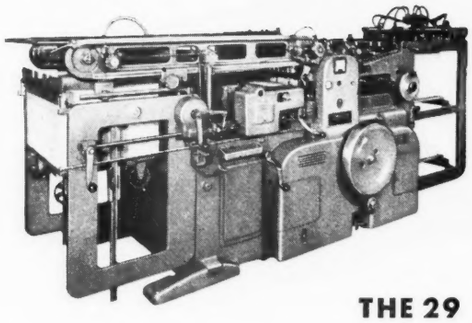
653-9

The Miehle



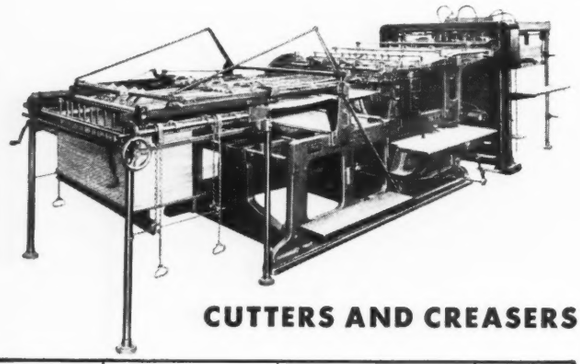
VERTICAL

Press Model	Maximum Sheet	Bed Size	No. of Form Rollers	Speed Up to
V-50	14" x 20"	17 3/4" x 22"	2	5000



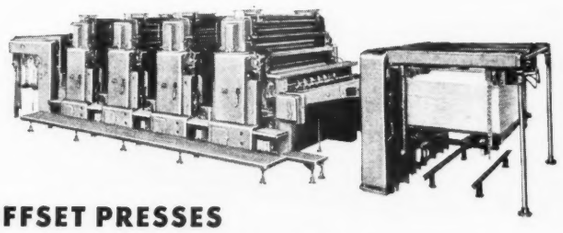
THE 29

Press Model	Maximum Sheet	Bed Size	No. of Form Rollers	Speed Up to
29	22" x 28"	25 1/2" x 29"	2	4500



CUTTERS AND CREASERS

Press Model	Maximum Sheet	Bed Size	Speed Up to
29	22" x 28"	25 1/2" x 29"	4500
49	32" x 48 1/2"	36 5/8" x 49"	2400
61	38 1/4" x 60 1/2"	44 1/8" x 61"	2200
70	46 1/4" x 69 1/2"	50 3/4" x 70"	1900



OFFSET PRESSES SINGLE OR MULTICOLOR

Press Model	Maximum Sheet	Plate Size	Design Size	Speed Up to
61	42" x 58"	47 1/8" x 59"	41 5/8" x 58"	6500
76	52" x 76"	57 1/8" x 77"	51 5/8" x 76"	6000

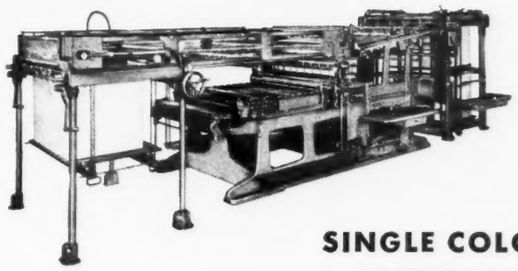
MIEHLE PRINTING PRESS and MANUFACTURING COMPANY • Chicago 8, Illinois

for 60 years the trademark of the finest in design, engineering and precision manufacture

The Miehle nameplate has become a familiar trademark-of-quality to printers throughout the world—a reflection of over a half-century of progress in research, development and design of the finest printing presses.

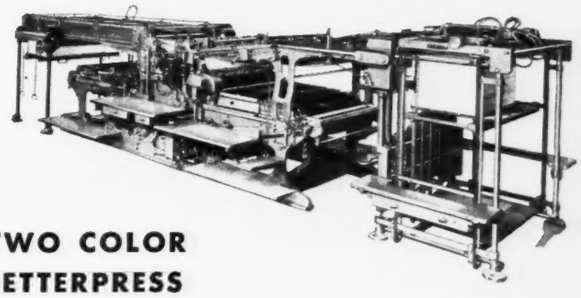
Miehle presses have played an important role in the printing industry, from the first cylinder presses of 60 years ago, to today's modern, high-production, automatic equipment.

Consistent, outstanding performance during these many years has made the Miehle trademark a seal of quality—a guarantee of the very finest in printing presses.



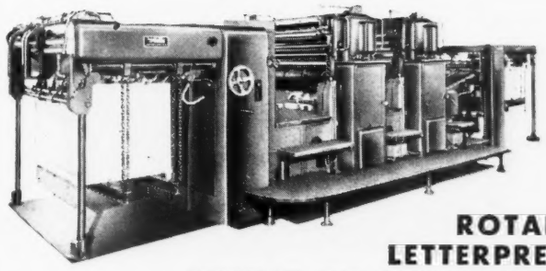
SINGLE COLOR LETTERPRESS

Press Model	Maximum Sheet	Bed Size	No. of Form Rollers	Speed Up to
41	28" x 41"	31 3/8" x 41 1/2"	4	3000
46	33 1/4" x 45 1/2"	36 5/8" x 46"	4	2800
56	42" x 56"	44 1/2" x 56 1/2"	4	2250



TWO COLOR LETTERPRESS

Press Model	Maximum Sheet	Bed Size	No. of Form Rollers	Speed Up to
41 TC	27 1/4" x 41"	29 7/8" x 41 1/2"	4	2800
46 TC	32" x 45 1/2"	36 1/8" x 46"	4	2500
56 TC	38" x 56"	42 7/8" x 56 1/2"	4	2250
6/0 TC	46 1/4" x 69 1/2"	52" x 70"	4	1500



ROTARY LETTERPRESS SINGLE OR MULTICOLOR

Press Model	Maximum Sheet	Design Size	No. and Size of Form Rollers	Speed Range I.P.H.
61	42" x 60"	41 5/8" x 59"	2-3 3/4" Dia. 2-4" Dia.	3000 to 6000
76	52" x 76"	51 5/8" x 75"	2-3 3/4" Dia. 2-4" Dia.	2750 to 5500

When In Chicago...

During the Graphic Arts Exposition you are invited to visit the Miehle plant to see how Miehle presses are made and to discuss your printing problems with us. Make a note now to include a Miehle plant visit on your Chicago schedule!

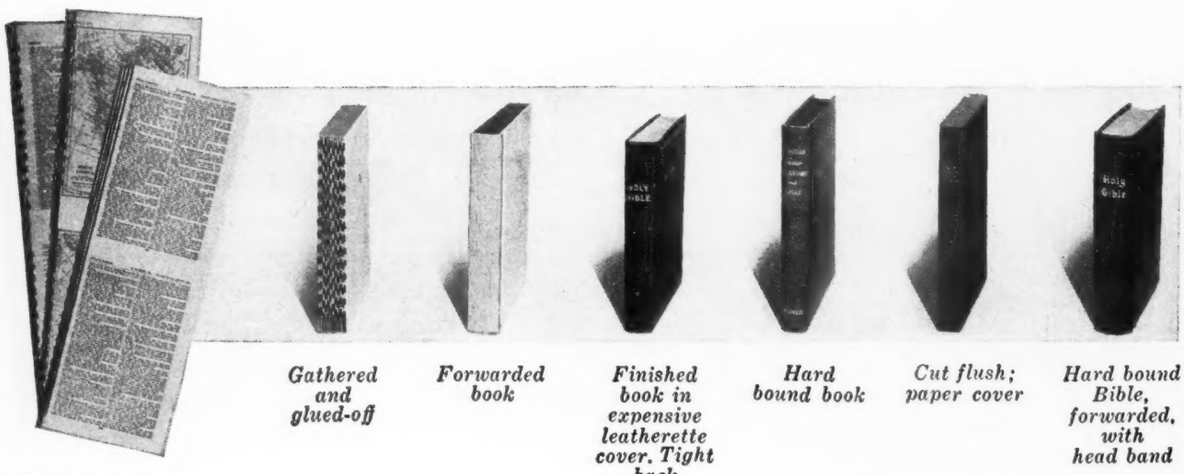
World's Largest Manufacturer of Sheet-Fed Presses

? ? ? and answers

on the newly developed

DEXTER-CAHEN Notched Binding!

What is it?	A new process applicable to hard and flexible bindings: books, catalogs, booklets, magazines, in fact, to practically all publications.
What are its Advantages?	It does away with sewing and wire stitching, and makes a binding of incredible strength.
What holds the Binding Edges?	A newly developed hot melt glue which dries almost instantly. Regular cold glue also may be used.
What is the Procedure?	a. Each signature is notched after folding. b. Signatures are gathered, including end sheets and inserts, if any. c. Books are glued off before trimming. Paper bound books are glued off and cover can be attached—in one operation. Subsequent operations are the same as on any regularly sewn and bound book or other publication.
Can Books be Notched Two-up?	All books up to 6 x 9" may be notched two-up.
How is the NotchingDone?	The Dexter-Cahen Machine notches out signatures on folded edge.
What about Production Speed?	This machine is driven by an adequately powered motor with 3 to 1 speed range. Machine has a rated speed of 100 signatures per minute.
Is it possible to Round and Back Notched books?	Yes. And no "steps" will develop after book is rounded. This process rounds and backs with less effort and power than on sewn books.
Will book Open Flat?	Yes. And it will hold better than any conventional style binding.
Can the Process be Seen in Action?	Yes. We will be glad to arrange this.



Assorted sections showing notching. Depth of notch depends upon thickness of sections.

Gathered and glued-off

Forwarded book

Finished book in expensive leatherette cover. Tight back

Hard bound book

Cut flush; paper cover

Hard bound Bible, forwarded, with head band

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO · SEPTEMBER 11-23 · 1950

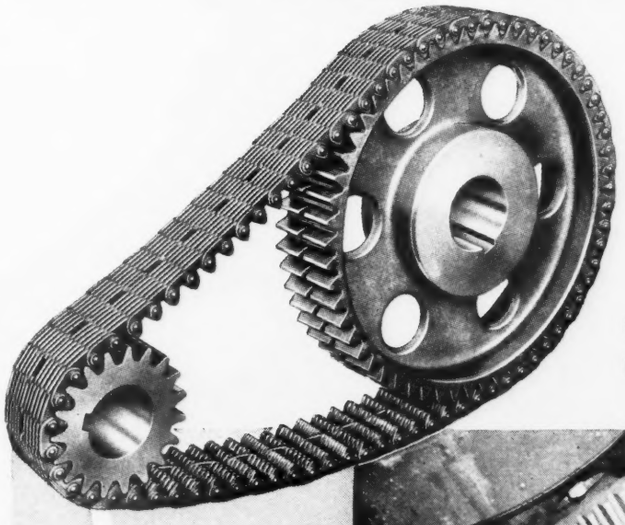
Sold and serviced by

Dexter Folder Company

General Sales Offices

330 WEST 42nd STREET • NEW YORK 18, N. Y.

For The BEST In Press Performance

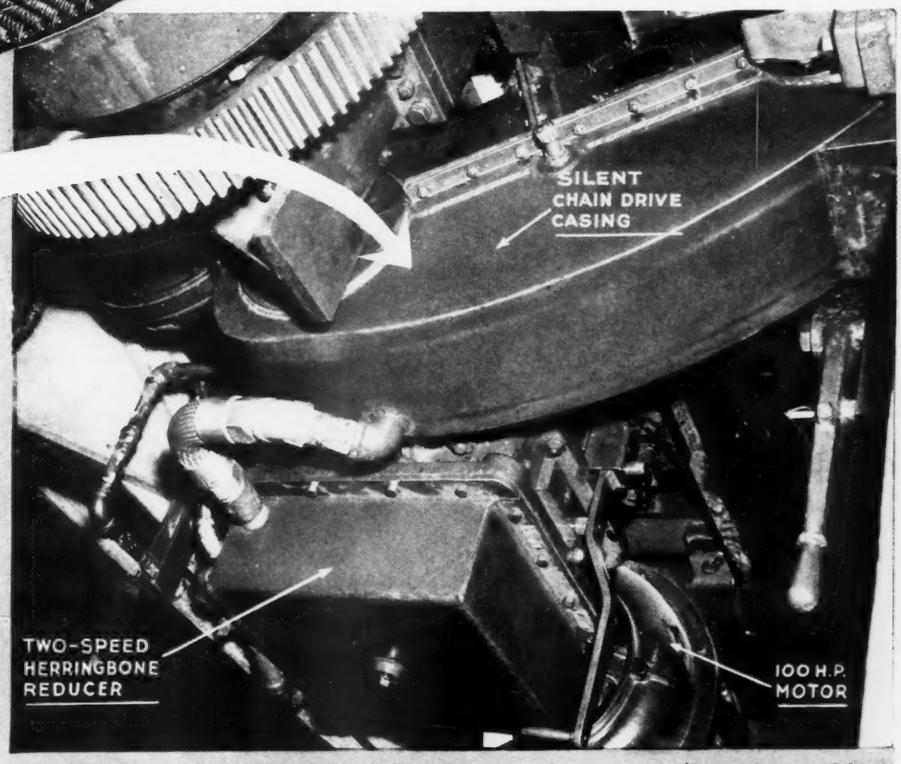


LINK-BELT *Silverstreak* Silent Chain Drive

Better Register

Dependable

Low Maintenance Cost



Link-Belt High-Speed Silent Chain Drive from a 100 h.p. motor to line shaft of one of the world's fastest newspaper printing presses . . . Silent Chain operating in oil-tight casing, runs to 3850 or 4700 feet per minute, the speed being preset through a two-speed gear box.

Flexible as a belt, positive as a gear — and more efficient than either! That was proved when Link-Belt Silverstreak Silent Chain Drives were first introduced. That proof is doubly important today with higher press speeds, increased power, and accurate register.

Designed for long-life service in both newspaper and commercial printing presses, these drives are positive in action, dependable, are unaffected by atmospheric conditions, and require practically no attention or upkeep. Easily applied, they can often simplify press construction.

For complete information on your specific needs, get in touch with our nearest office.

LINK-BELT COMPANY

Chicago 9, Indianapolis 6, Philadelphia 40, Atlanta, Houston 1, Minneapolis 5, San Francisco 24, Los Angeles 33, Seattle 4, Toronto 8. Offices in Principal Cities.

*2,060

LINK-BELT *Silverstreak* SILENT CHAIN DRIVES

FOR THE FINEST STEREOTYPES—*fast!*

The HOE HYDRAULIC MOULDING PRESS, designed for the fast production of the finest quality of stereotypes, builds up an eight-hundred-ton pressure in seven seconds!

Impressions are deep, sharp and uniform. Maximum accuracy is assured for color work. Mat stretch and buckling are held to a minimum. The 28½″ diameter ram provides uniformity of pressure on the largest forms, with no light spots at the corners. The 28″ x 32″ platen is evenly heated electrically.

The frame is of solid steel; ram and cylinder are cast steel, with bronze ring inside cylinder to minimize wear. No connections of any kind, other than for electric power, are required. The pump operates only during the moulding cycle.

The Hoe Direct Pressure Hydraulic Matrix Moulding Press is furnished for either cold or hot moulding, and for single or two-side operation.

Direct Pressure Hydraulic Matrix Moulding Press

Dependable FOR CONTINUOUS SERVICE

Monarch II Roller Bearing Matrix Roller

For the requirements of long, continuous operating schedules, the heavy, precision construction of the HOE MONARCH II MATRIX ROLLER assures consistently high mat quality.

Notable for its ease and safety of operation, the Monarch II has push-button control conveniently accessible from either end of machine. Depth of impression is regulated by a visual micrometer adjustment. Heavily constructed table is 35″ x 46″.

Machines may be arranged for single-speed operation, with a choice of speeds of 8 seconds or 15 seconds, or for two-speed operation with a speed of 8 seconds and 24 seconds.

Write for detailed information on these machines and other Hoe plate-making equipment.

R. HOE & CO., INC.

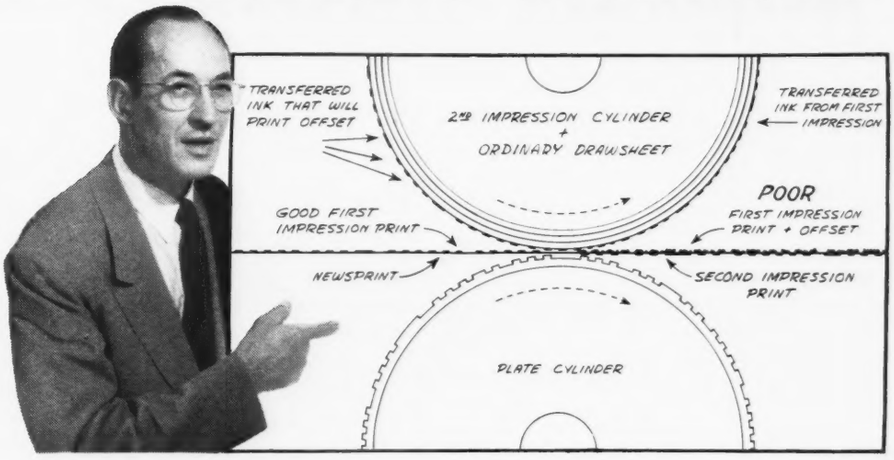
910 East 138th Street New York 54, N. Y.

BRANCHES: BOSTON • CHICAGO • SAN FRANCISCO
BIRMINGHAM • PORTLAND, ORE.

Here's why 1100 newspapers have switched to "SPHEREKOTE" Drawsheets

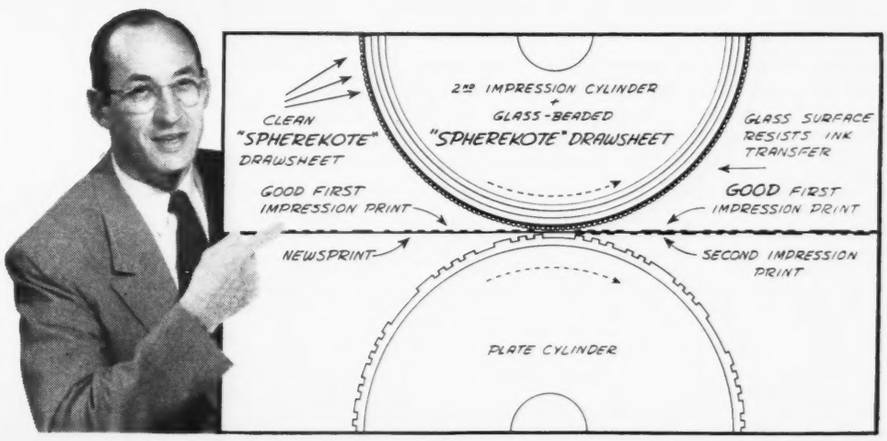
ORDINARY DRAWS PICK UP INK!

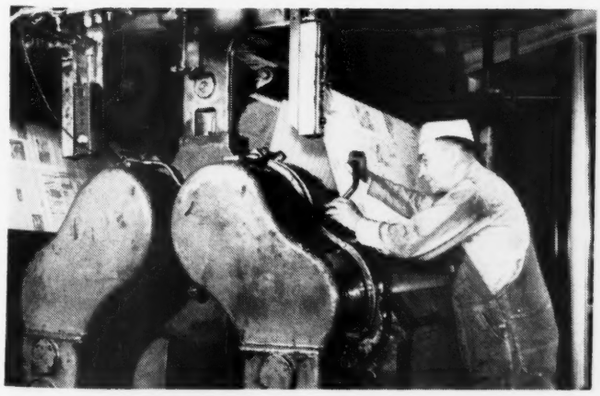
The conventional draw has a coated, ink receptive surface. When it comes in contact with the wet newsprint it picks up and then transfers this ink back to the next first-impression print, producing muddy reproductions.


TRANSFERRED INK THAT WILL PRINT OFFSET
2nd IMPRESSION CYLINDER + ORDINARY DRAWSHEET
TRANSFERRED INK FROM FIRST IMPRESSION
GOOD FIRST IMPRESSION PRINT
POOR FIRST IMPRESSION PRINT + OFFSET
NEWSPRINT
SECOND IMPRESSION PRINT
PLATE CYLINDER

"SPHEREKOTE" DRAWS REPEL INK!

Microscopic glass beads on "Spherekote" Drawsheets repel ink, create a surface that means cleaner, sharper impressions every time. This new drawsheet also lasts for millions of extra impressions, more than saving its slightly higher initial cost.





ENJOY TROUBLE-FREE RUNS with the drawsheet that cuts first-impression offset, produces sharper, cleaner printing on both sides, withstands leader marking, gives you far greater mileage. Ideal for color work as well as black-and-white. Let us put these new draws on *your* presses. Full details from Dept. PE90, or we'll have a representative call if you wish.

REG. U.S. PAT. OFF.
SPHEREKOTE
BRAND
NEWSPAPER DRAWSHEETS
AND
BLANKETS

- For Large Metropolitan Newspaper Presses:
  Type 26 Drawsheets for three-piece combinations
  Types 83 and 93 Blankets for two-piece combinations
- For Smaller Weekly Newspaper Presses:
  Type 20

Made in U.S.A. by
MINNESOTA MINING & MFG. CO., St. Paul 6, Minnesota

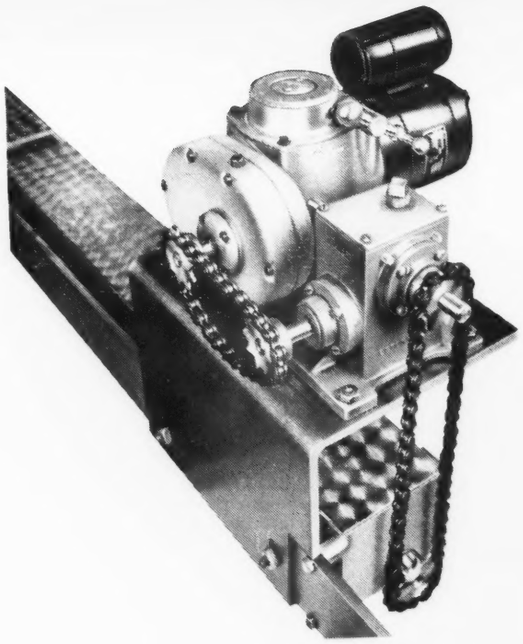
Also makers of "Scotch" Brand Pressure-sensitive Tapes, "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-Slip Surfacing, "3M" Abrasives, "3M" Adhesives.

NOW!

Speeds Press Runs up to 50% Delivers Better Printing

Two important advantages are yours now, with the new OXY-DRY Anti-Offset Powder: (1) elimination of all "fill-in" problems on letterpress, and (2) washup periods lengthened from 15,000 to 35,000 impressions, varying with job. OXY-DRY also offers you "POSITIVE POWDER CONTROL" in the new micrometer adjustment recently incorporated into the OXY-DRY SPRAYER.

Let us show you in detail how OXY-DRY methods can save you time and money. Write today—and see us at the 6th Educational Graphic Arts Exposition!

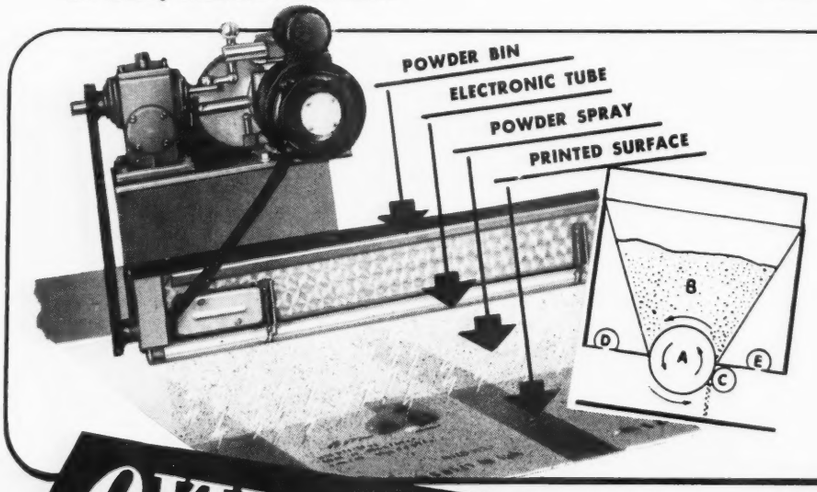


THE OXY-DRY SPRAYER (shown above) will be in operation at our display at the 6th Educational Graphic Arts Exposition—Sept. 11 to 23. See how the micrometer setting controls the exact flow of powder during actual demonstration on long press runs.

The OXY-DRY SPRAYER is a patented device.

Here Are the Advantages of the OXY-DRY SPRAYER

1. Uniform Offset Prevention on all types of work.
2. Positive Powder Control—with new micrometer speed adjustment.
3. Elimination of Static Electricity from Sheets permits easy flow of work.
4. Fast Drying of Ink and Faster Handling of Sheets permits full press delivery.
5. Time and Labor Saved, fewer press interruptions.
6. No Dusting Hazard—small amount of powder used. Powder is fully-endorsed health factor.



HOW THE OXY-DRY SPRAYER WORKS

● As brass cylinder (A) revolves, anti-offset powder (B) is distributed past electronic tube (C) receiving 10,000 volt positive charge and bonding instantly across freshly-printed surface below. The static electricity (negative electric charge) in the paper is instantly dispelled. Air vents (D & E) set up air curtains, and are required only under extremely drafty shop conditions. Micrometer setting controls speed of revolution of cylinder (A) and exact amount of powder distributed.

OXY-DRY

For further information write Dept. E

OXY-DRY SPRAYER CORP.

320 So. Marshfield Ave., Chicago 12, Ill.

FULL-PRESS-DELIVERY OFFSET PREVENTION

New offset press prints 6,000 sheets an hour on TIMKEN® bearings

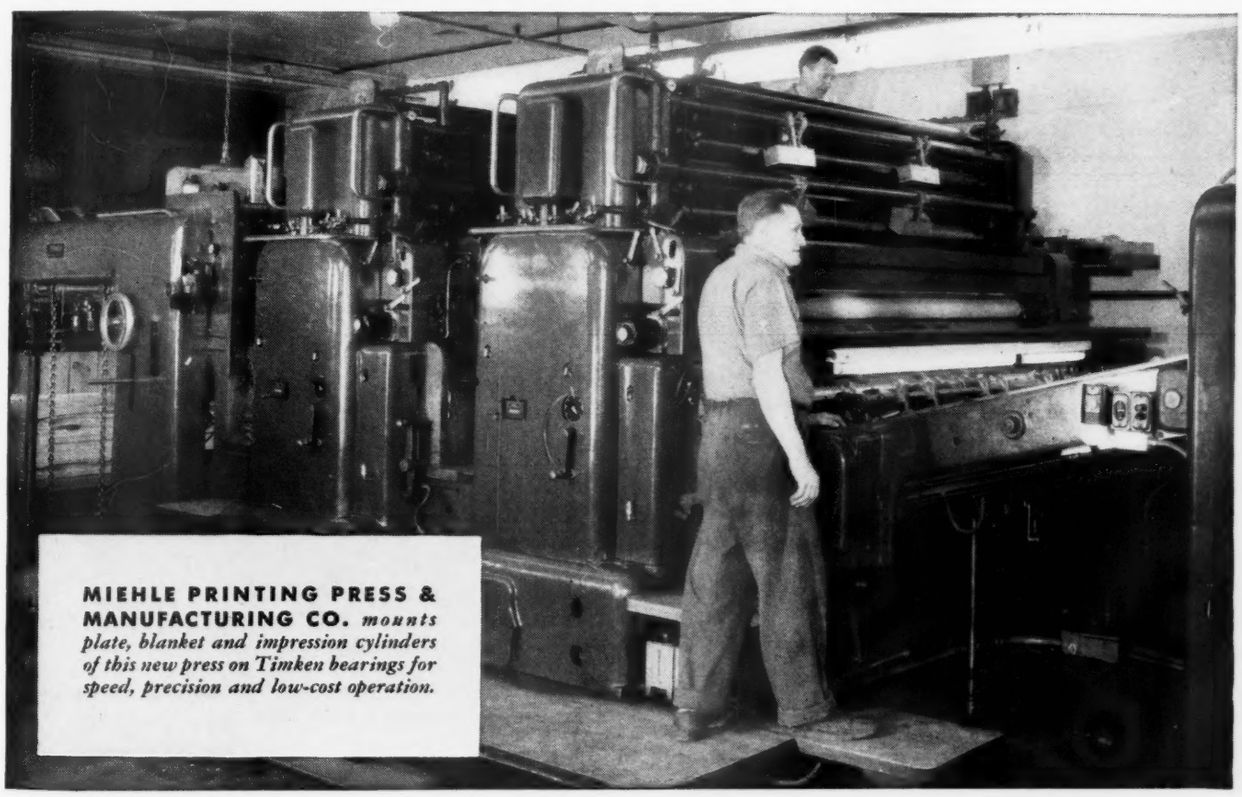
WITH plate, blanket and impression cylinders mounted on Timken® bearings, this new two-color Miehle Offset Press runs at a speed of 6,000 sheets an hour.

Timken tapered roller bearings eliminate all speed restrictions due to bearings in printing press cylinders. They assure accuracy and high quality in printing, too—by keeping the cylinders in rigid, permanent alignment. In this case, the Timken bearing with a maximum run-out of only .0003 of an inch is used to insure extreme, lasting precision. Wear on moving parts is reduced. Maintenance costs are cut.

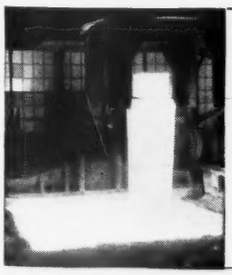
Loads from all directions—radial, thrust and combination—are carried by the tapered construction of Timken bearings. Line contact between rollers and races provides maximum load capacity. And the bearings normally last the life of the machine because they're engineered for the job, made of Timken alloy steel, and precision manufactured.

No other bearing can give you *all* the advantages you get with Timken bearings. Insist on bearings stamped with the trade-mark "Timken" for every machine you make or use. The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".

This symbol on a product means its bearings are the best.



MIEHLE PRINTING PRESS & MANUFACTURING CO. *mounts plate, blanket and impression cylinders of this new press on Timken bearings for speed, precision and low-cost operation.*



WE MAKE OUR OWN STEEL

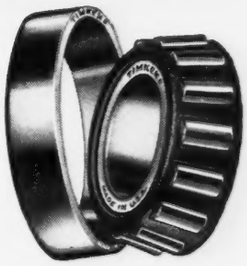
The special grade alloy steel which gives Timken bearings their strength and resistance to wear, is made in our own steel mills.

The Timken Roller Bearing Company is the acknowledged leader in: 1. advanced design; 2. precision manufacturing; 3. rigid quality control; 4. special analysis steels.

TIMKEN

TRADE MARK REG. U. S. PAT. OFF.

TAPERED ROLLER BEARINGS



NOT JUST A BALL NOT JUST A ROLLER THE TIMKEN TAPERED ROLLER BEARING TAKES RADIAL AND THRUST—LOADS OR ANY COMBINATION

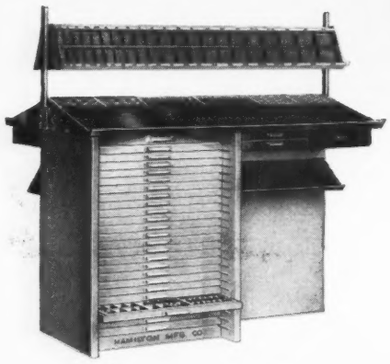
See for yourself —a complete showing of

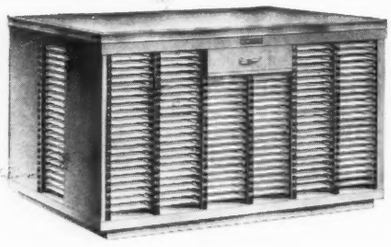
Hamilton PROFIT AIDS

for Composing Rooms

When you visit the Graphic Arts Exposition you'll find no better way to spend your time *profitably* than by investigating carefully the exclusive developments by Hamilton that are engineered to save time and cut costs in commercial and newspaper composing rooms.

BOOTH NOS.
405-407
409-410





Here, in one thousand square feet of floor space, you will see representative items from the complete Hamilton line. Included also will be new equipment never before exhibited.

Here also you will meet capable, courteous Hamilton factory representatives who will be at your service, without obligation, for detailed discussions of your composing room layout and other problems.

We look forward to meeting you.

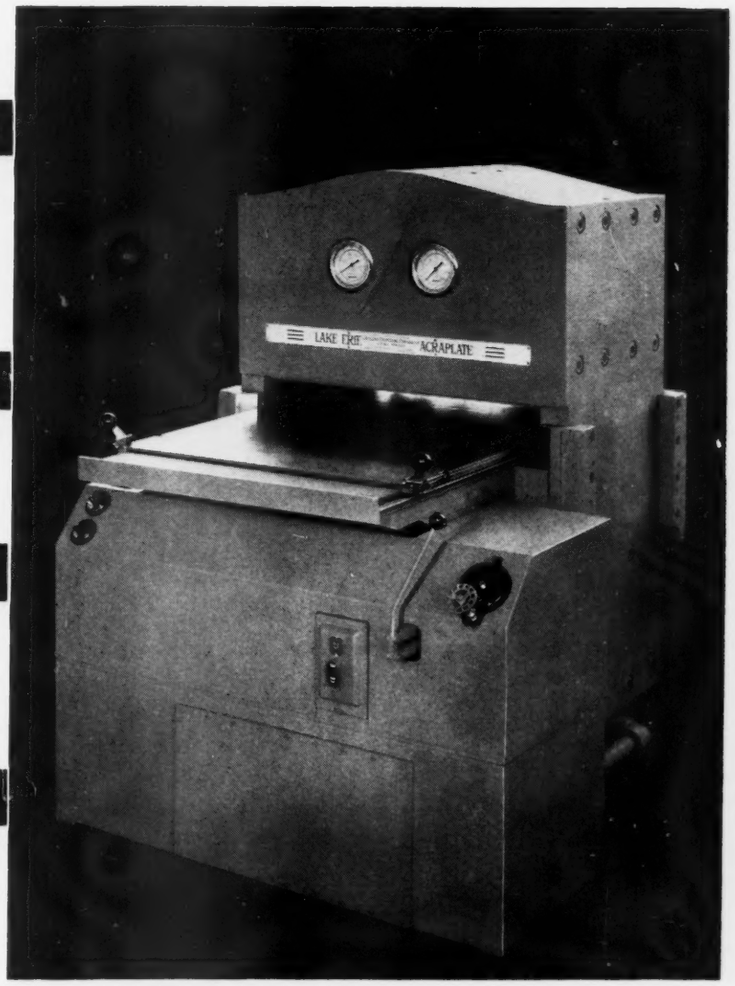
Hamilton Manufacturing Company
Two Rivers 7, Wisconsin

The Sixth Educational
GRAPHIC ARTS EXPOSITION

International Ampitheatre, Chicago
September 11-23, 1950

Progressive plants using ACRAPLATES are cutting costs with

RUBBER and PLASTIC PRINTING PLATES



REDUCED STORAGE AND SHIPPING COSTS

Eliminate the profitless investment and costly storage of standing forms. Resinous matrices can be stored indefinitely in 1/4 the space and weigh only about 1/30 as much.

IMPROVED QUALITY

For many applications, rubber or plastic plates can produce quality printing jobs impossible by other methods.

FASTER PRESS SPEEDS

Higher press speeds are often possible and additional savings in press time frequently result by running more jobs in multiple.

AND MANY OTHER ADVANTAGES

Gathering and jogging are speeded due to extremely light impression and elimination of embossing. There are definite savings in ink and make-ready costs are substantially reduced.

Nearly 400 ACRAPLATES are already in service in leading plants bringing them the many savings and advantages for which this equipment is designed. And additional ACRAPLATES are now going into service at the fastest rate ever. This is a trend that can have an important bearing on the future of your business. Don't you think it would be worthwhile to find out what rubber or plastic plates might do for you... how they could improve your plant efficiency, customer relations and competitive position. Write for the facts.

WRITE for *complete* facts about the ACRAPLATE. Learn how it can improve your services and profits. No obligation.

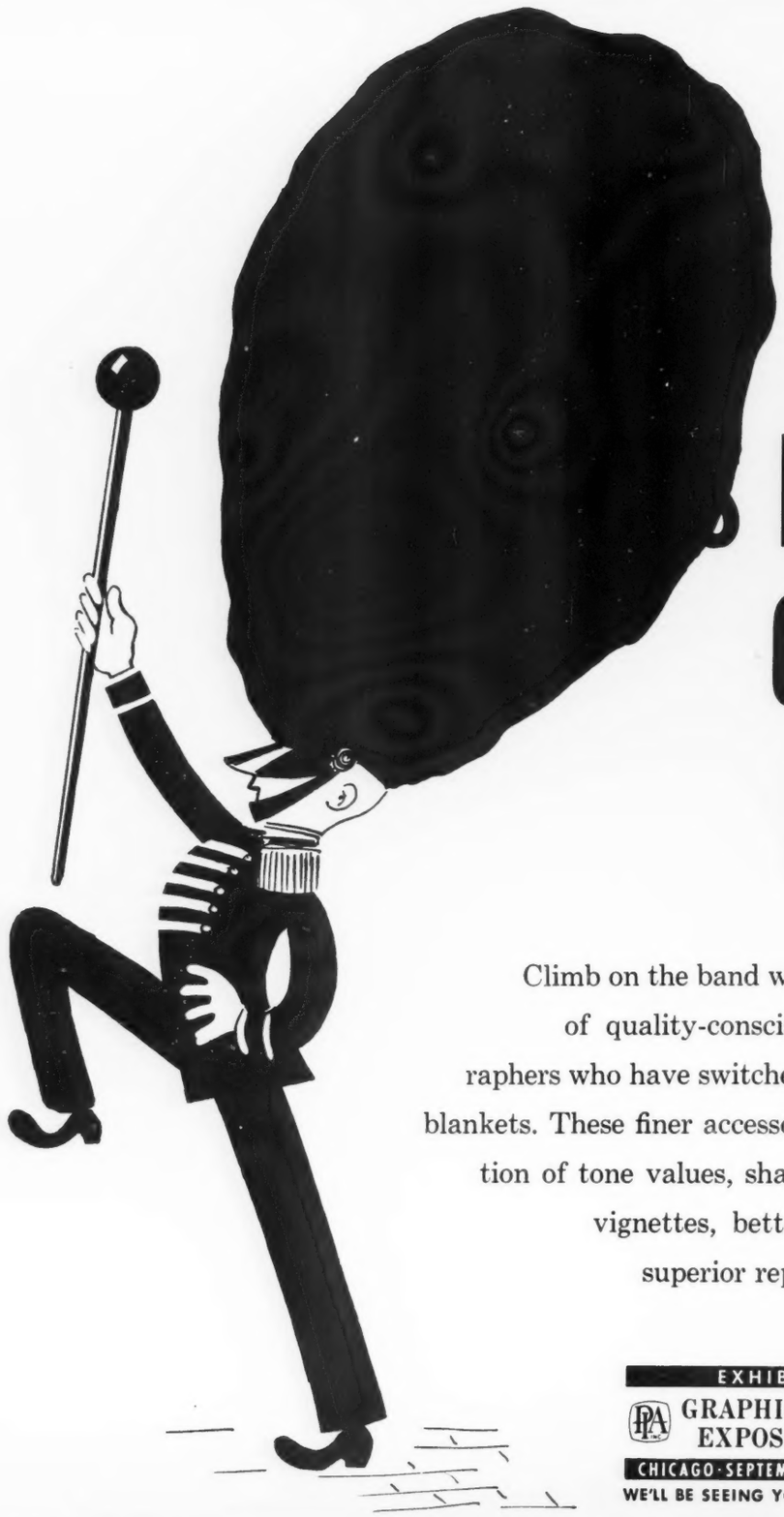
LAKE ERIE
ENGINEERING CORP.
BUFFALO, N.Y. U.S.A.

LAKE ERIE ENGINEERING CORP.
568 Woodward Avenue, Buffalo 17, New York
Offices in Principal Cities and Foreign Countries

★

● Leading manufacturer of hydraulic presses—all sizes and types—stereotype molding... rubber and plastic plate making... rubber vulcanizing... metal working... forging... metal extrusion... plastics molding... processing... special purpose.

LAKE ERIE ® ACRAPLATE ®



LEAD THE QUALITY PARADE

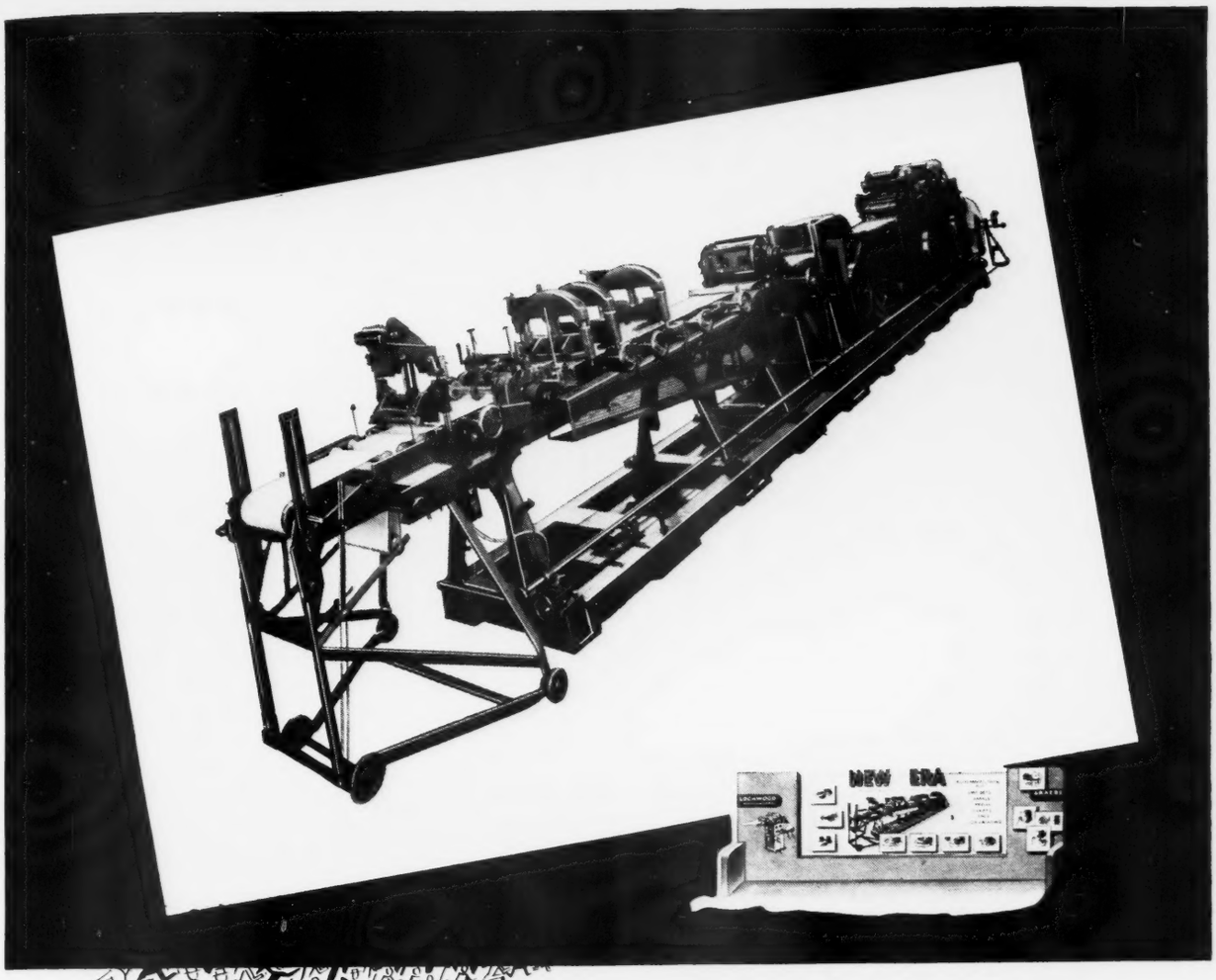
Climb on the band wagon! Join the thousands of quality-conscious printers and lithographers who have switched to Mercury rollers and blankets. These finer accessories assure better definition of tone values, sharper contrasts, smoother vignettes, better coverage on solids—superior reproduction in every way.

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO · SEPTEMBER 11-23 · 1950
WE'LL BE SEEING YOU IN BOOTH 354

RAPID ROLLER CO.

FEDERAL AT 26TH
CHICAGO 16, ILL.

D. M. RAPPORT
PRESIDENT



make a beeline for booth 343 for "honeys" of profitable ideas

GRAPHIC ARTS EXPOSITION

Here's your chance to see and study the work of the most versatile press on the market today. You'll see on display the extremely wide variety of jobs that have been printed and finished on a flat bed New Era Multi-Process Press. You'll learn how various adaptations of this "basic" press allows you to print tags, labels, tickets, unit sets and other forms at high speed and with minimum makeready. You'll find out how standardized optional units may be added anywhere along the line—any time after installation—to perforate, punch, slit, die-cut, score, cut, number, print on two sides, insert metal eyelets, etc.

You'll discover how fast New Era runs—up to 7,500 multi-color impressions an hour—how perfect distribution and uniform impression are assured.

A New Era upper print unit will be on display, too. Check this unit for the following features: heavy construction, ink distribution, steel form carriers, no welded frames on printing beds, roller bearing drive, etc.

Representatives will be on hand to show you just how the New Era Multi-Process Press can open up opportunities for greatly increased profits. Don't miss Booth 343—it's a real eye-opener.

VISIT NEW ERA'S BOOTH—NO. 343 AT GRAPHIC ARTS EXPOSITION

MANUFACTURING CO.
375 — 11th Ave., Paterson 4, N. J.

6790

75th *Anniversary*

1875-1950
Three quarters of a century's service

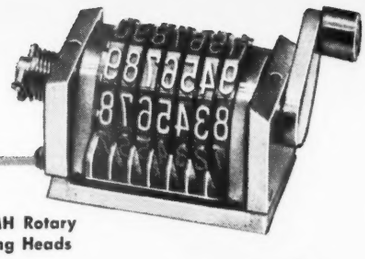
FORCE

makes a machine to handle each and every NUMBERING JOB!

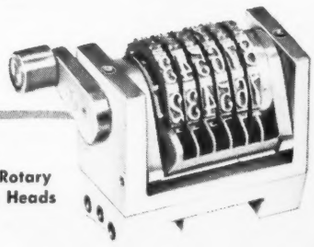
There's a Force Rotary Numbering Head or Typographic Numbering Machine for every press requirement —for every numbering job in the shop. Many involved and complicated jobs have been made simple. If the machine you need isn't standard, FORCE engineers will help you design the most efficient equipment to meet your requirements. FORCE reputation for good and faithful service dates back three-quarters of a century.

Write for Catalog J, showing complete line of Numbering Machines.

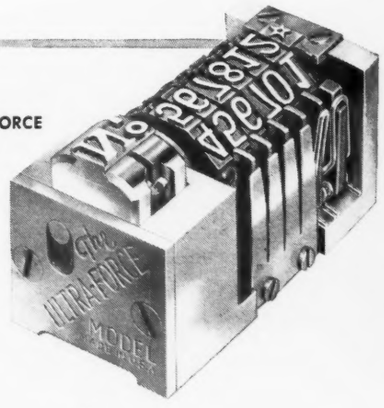
FORCE also manufactures a full line of precision made Hand numbering and dating machines.



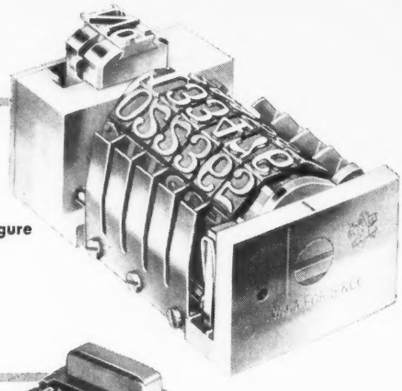
FORCE MH Rotary Numbering Heads



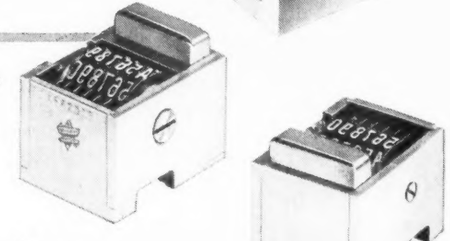
FORCE DU Rotary Numbering Heads



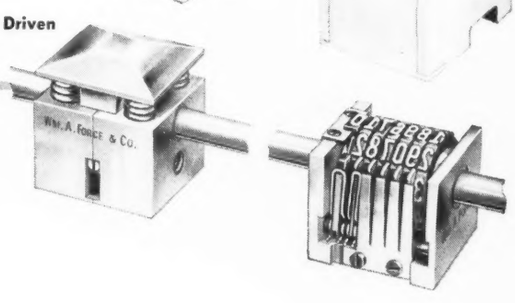
The Ultra-FORCE Typograph



FORCE large Figure Typograph



FORCE Top and Bottom Plunger Typographs

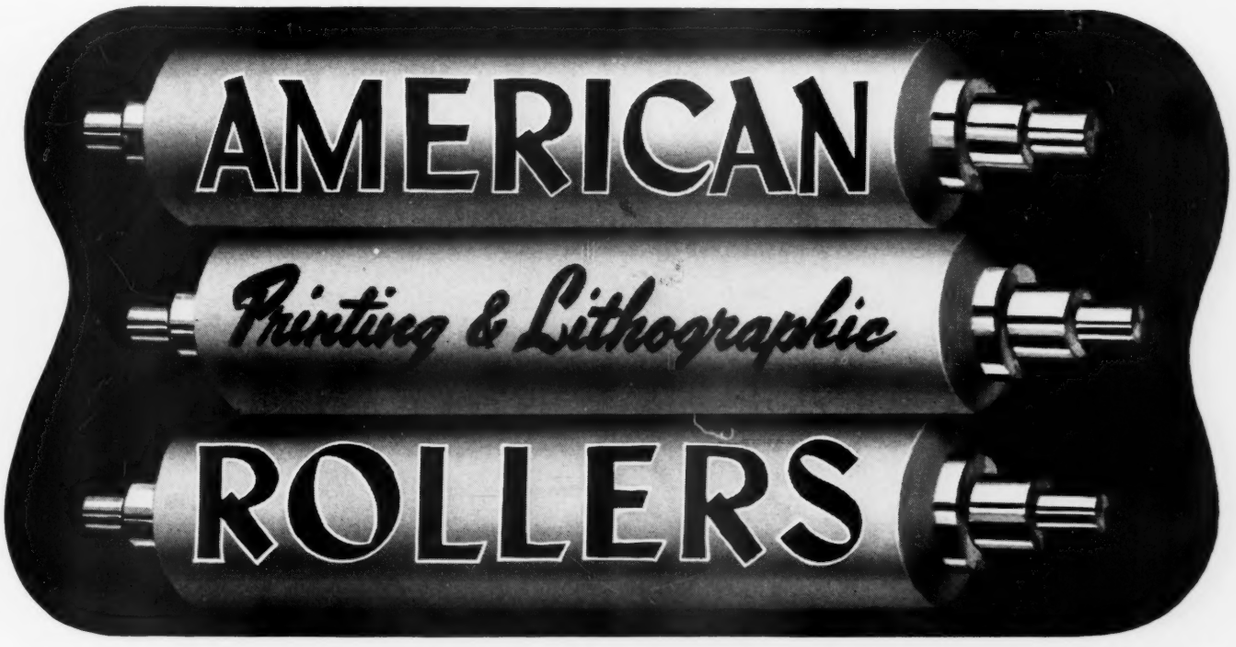


FORCE Center Driven Typograph

The FORCE of Numbers

WM. A. FORCE & COMPANY
INCORPORATED
216 NICHOLS AVENUE, BROOKLYN 8, N. Y.

Distinguished FOR ULTRA-FINE PRESSWORK



IN HUNDREDS OF EXACTING PRESSROOMS

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO SEPTEMBER 11-22 1950

ALL - SYNTHETIC RUBBER ROLLERS
COMPOSITION ROLLERS
LITHOGRAPH ROLLERS
MAKE READY PASTE
PADDING GLUE
LONG LYF ROLLER DRESSING

• It is no mere hapinstance that AMERICAN ROLLERS are constantly serving in the country's leading printing and lithographic plants. Rather, it's a direct result of the outstanding record these excellent rollers have established for distinguished performance in the production of ultra-fine presswork.

• Rigid pre-conditioning is the answer. From start to finish an AMERICAN ROLLER is a product of scrupulous regulations and severe controls . . . in raw materials . . . in processing . . . in finishing and in final conditioning. That's why they're extra durable. That's why they've got what it takes to do the job for which they're made. And that's why they stand up ruggedly and turn out consistently the finest presswork it is possible to produce. See for yourself. Order a set today.

SEE US AT THE GRAPHIC ARTS EXPOSITION, BOOTH 175

AMERICAN ROLLER COMPANY
1342 NORTH HALSTED STREET . . . . . CHICAGO 22, ILLINOIS
225 NORTH NEW JERSEY STREET . . . . . INDIANAPOLIS 4, INDIANA

Keeping in Touch

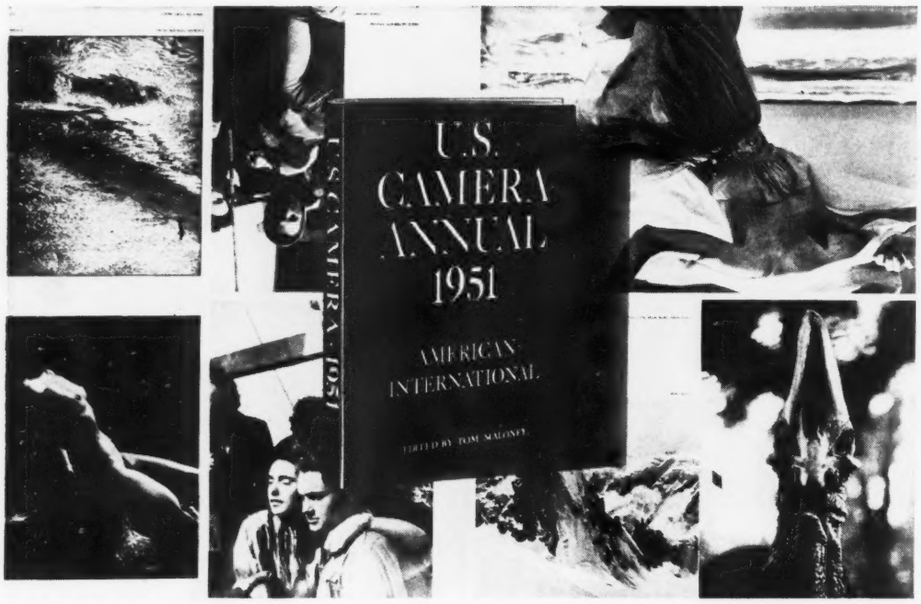
International Printing Ink ®

IPI, Holdfast and Gemtone are trade marks of Interchemical Corporation

31 Branch Offices in Principal Cities

IPI • DIVISION OF INTERCHEMICAL CORPORATION • 67 WEST 44TH STREET, N. Y. 18 • ADDRESS INQUIRIES DEPT. A

BRAND NEW IPI BLACKS, PROCESS INKS CHOSEN TO PRINT 412 PRIZE PICTURES IN "MOST WANTED" PHOTO ANNUAL



The 1951 U. S. Camera Annual contains 412 of the world's finest photographs in black and white and 16 pages of color photos—all printed with IPI inks.

Your IPI salesman has a free 16 page signature for you. It is yours for the asking. Or write IPI Headquarters, 67 West 44th Street, New York 18, New York.

"GEMTONE INKS JUST WON'T CRYSTALLIZE" "GIVE SNAP AND SPARKLE", SAY PRINTERS

"Your Gemtone Process Inks are wonderful! They just won't crystallize," says one printer (name on request) who waited *six months* after printing the first two colors of a job to add the other two. He proved that Gemtone Inks still trap perfectly even after long periods! "Gemtone Inks sparkle," says every printer who uses them. Gemtone Inks give sparkling, lustrous color results every time because they're made to dry on *top* of the sheet. They dry fast, without heat, on sheet-fed presses.

Halftone Dots Sharp, Clean

With Gemtone Inks halftone dots print sharp and clean with the illusion of depth. Dryback is eliminated, highlights stay bright, backgrounds are smooth, details have clarity and snap. And printers tell us they get better mileage with Gemtone Inks since they stay on top of the sheet where they belong.

Give Premium Finish

Gemtone Inks give your work a "premium finish" which commands a premium price. See Gemtone printing for yourself and get a true idea of the sparkling process color work they produce. Compare the new IPI Gemtone Process Inks with conventional inks and you will buy Gemtone. Send today for the free Gemtone Comparison folder. Ask your IPI salesman or write us at IPI Headquarters, 67 W. 44th St., N. Y. 18, N. Y.

Certificate Design Winners Announced

Winner of the $250 first prize in IPI's first Certificate Design competition is Fred Frank, Timken Vocational High School, Canton, Ohio. His design, shown below, has been reproduced for distribution to all teachers who cooperated in last year's Essay Contest. Second prize, $100, went to Portland, Me., High School, while Lew Wallace School Print Shop, Gary, Ind., won $50. Four other prizes of $25 each were awarded.

Prospect Press Picks New IPI Holdfast Halftone Blacks For 1951 U. S. Camera Annual

Again, for the 16th straight year, the U. S. Camera Annual has been printed with IPI inks. This year the printer, Prospect Press, Inc., of New York, chose one of the new improved IPI Holdfast Halftone Blacks and the new IPI Process Inks.

Blacker, Tougher Blacks

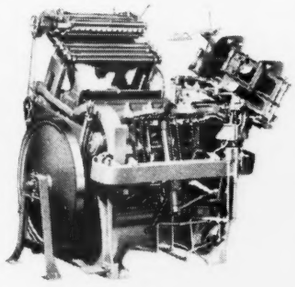
The new IPI Holdfast Halftone Blacks are more rub and scratch resistant than ever before. And *they develop this resistance much faster in the pile* for safer handling immediately after printing. Their finer pigment dispersion gives a blacker black and more finish without objectionable bronzing or gloss. These blacks give you extra quality press results without extra price.

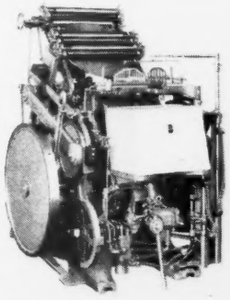
The U. S. Camera Annual has been printed by many different printers since 1935 and by several different processes—but always with IPI inks. Printing a bookful of prize-winning photographs demands the finest materials and superb craftsmanship.

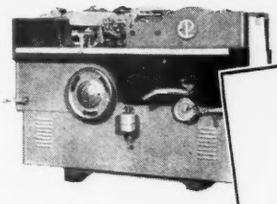
Like the 15 editions before it, the 1950 U. S. Camera Annual is the world's most wanted photographic volume. The printer's choice of IPI inks gives everyone what he wants —*true* reproduction of prize shots, with solid blacks and unmarred highlights.

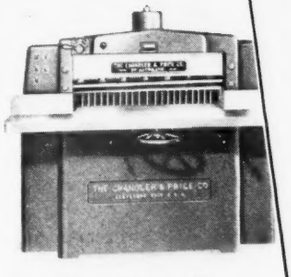
For your next halftone printing problem why not take a tip from the printers of 16 consecutive U. S. Camera Annuals? Try the new IPI Holdfast Halftone Blacks and IPI Process Inks. They are thoroughly tested on all types of commercial presses and popular stock —ready to give you extra quality printing results.

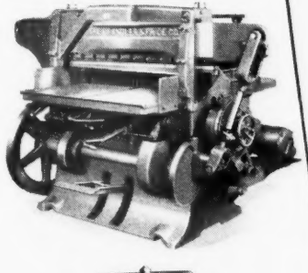
Protect Your Profits with Chandler & Price Equipment

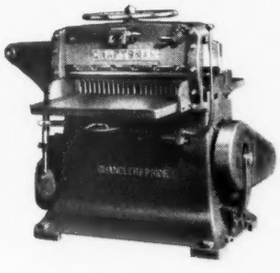






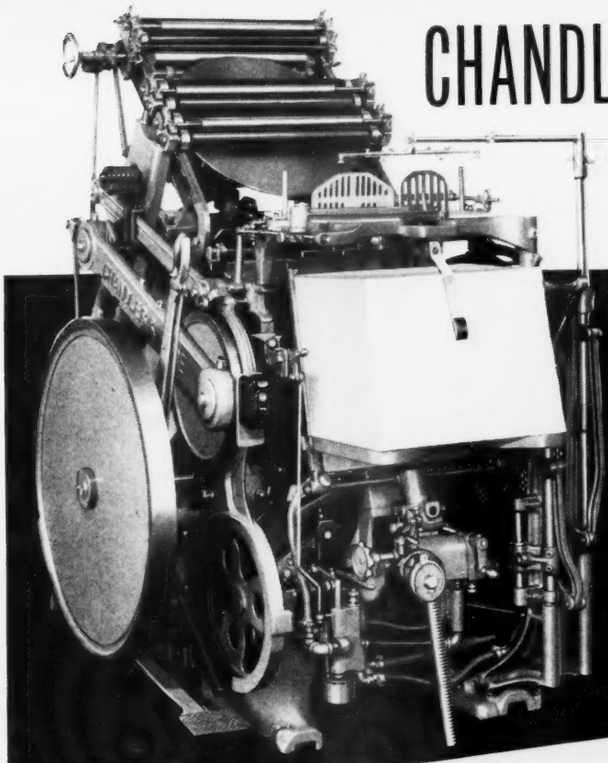






CHANDLER & PRICE

CRAFTSMAN AUTOMATIC



10 × 15
12 × 18

We are expecting you

TO VISIT THE C&P DISPLAY
BOOTHS 238-243
GRAPHIC ARTS EXPOSITION

to see the complete line of Chandler & Price Presses—both hand-fed and automatic—and the complete line of Chandler & Price Cutters—hand clamp and full automatic. All of the C & P presses and cutters illustrated on this page—and other C & P equipment—will be on display.

...ng

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...ation is ...ecured by four roller-bearing form rollers with two vibrators.

...ge 14½" ...of stock—from onion skin to 12-ply cardboard, including irregular shapes such as folding paper boxes and cut-out novelties.

If you use hand fed presses you are probably paying for a C & P Automatic. Why not profit by having one.

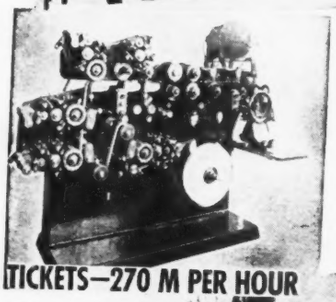
EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO-SEPTEMBER 11-23-1950

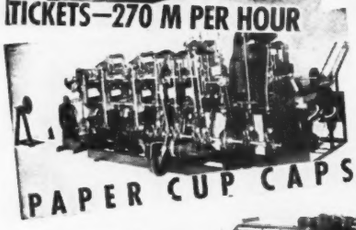
THE CHANDLER & PRICE COMPANY
CLEVELAND, OHIO

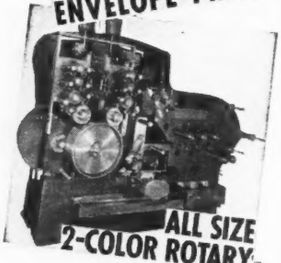
MANUFACTURERS OF PRINTING MACHINERY FOR OVER 60 YEARS

Young Engineering Co. • Leading Printing Equipment Authority

HIGH SPEED PRECISION BUILT PRINTING MACHINERY







LAST YEAR—

Young

Produced

26 Presses and Paper Converting Units. Outstanding among these were:

- 3 Color GRAVURE PRESSES—12 inch web size with cutting and rewind.
- Six new styles of TAG PRESSES.
- Three sizes of CONTAINER LID PRESSES with waxers.
- New TAG and TICKET ROTARIES.
- 16 Different SPECIAL PRESSES are going through the shop at present.

Send us your requirements.

YOUNG ENGINEERING CO.

World's Leading Mfrs. of Special Printing Presses

2431 N. SHEFFIELD AVE. CHICAGO 14, ILL.

The Modern Standard in Plate Molding Machines

THE 600 TON 'PLATEMASTER'

EXHIBITOR
GRAPHIC ARTS EXPOSITION
CHICAGO · SEPTEMBER 11-23-1950

- Equal high efficiency in producing plastic, wax, or Tenaplate electrotype molds, stereotype mats and rubber or plastic plates. Proven by leading platemakers.
- Designed and sold by an organization with real experience in plate molding technique, that knows the platemakers' problems.

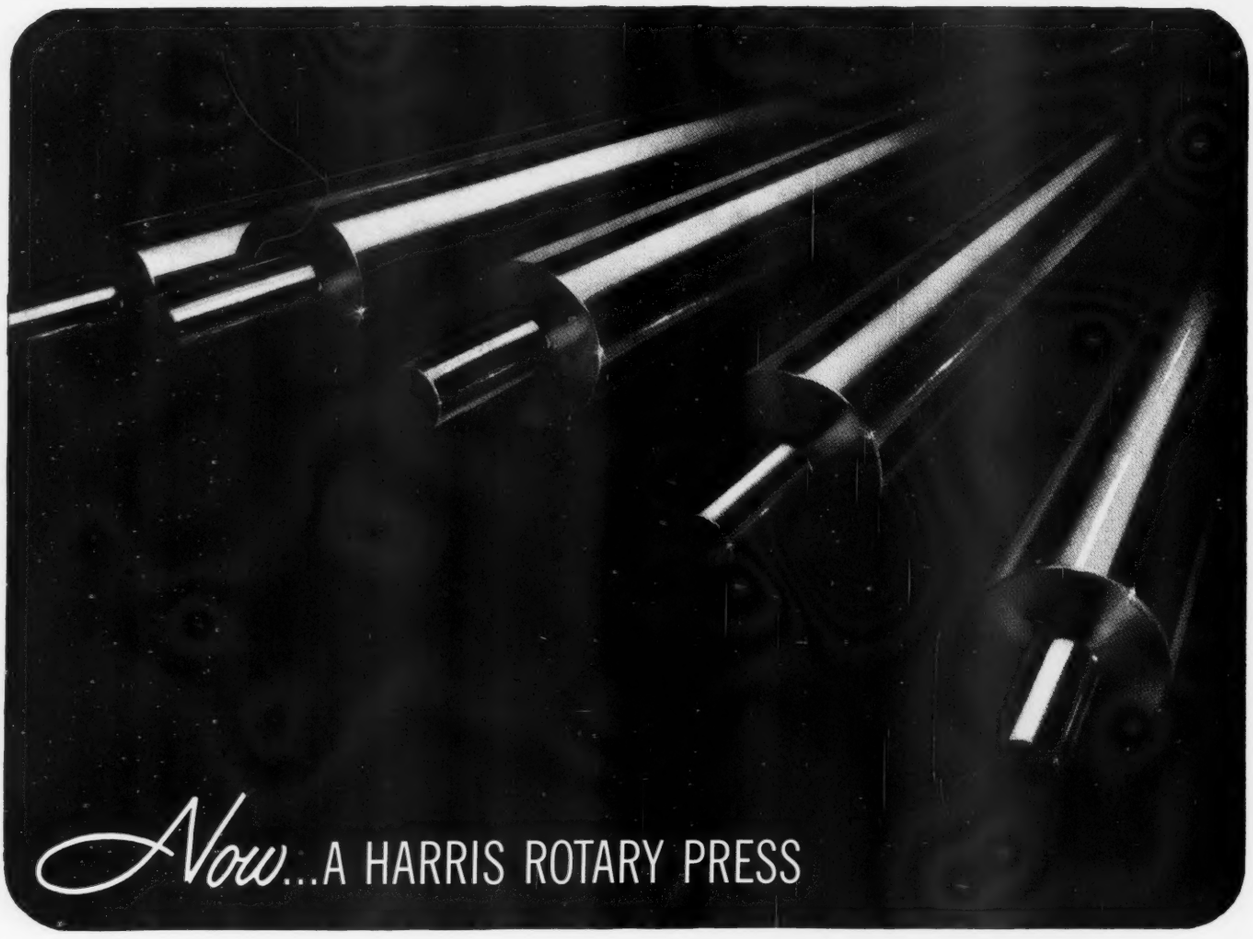
SPECIFICATIONS

Floor Size	4' ½" Width, 5' 3" Length
Platen Construction	Meehanite
Pumps	Oilgear
Hydraulic Controls	Oilgear
Closing Time	With 2" opening 2 seconds
Frame Construction	Single Steel Casting
Max. Molding Pressure	600 Tons
Platen Size	26" x 30" x 3½"
Heating Medium	Steam
Ram Diameter	22" solid casting
Weight	15,500 pounds
Motor	5 h.p. 1200 r.p.m.
Max. Daylight Opening	3¼"

Write for complete information and list of installations.

WILLIAMSON & COMPANY

CALDWELL, NEW JERSEY



with 5 FORM ROLLERS *for unequalled ink coverage*

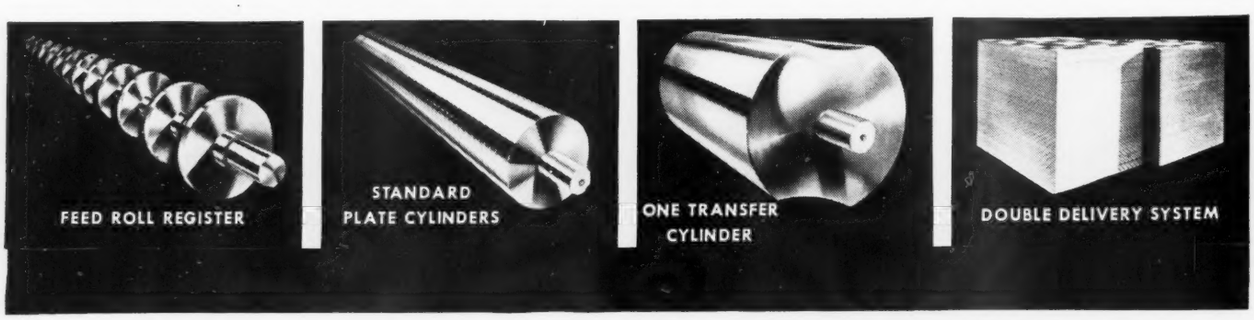
Every printer knows that the number of form rollers is the important factor in ink coverage. Here's a press with 5!

Five form rollers on the new, Harris two-color 45 x 65″ letterpress assure smooth, even coverage on the most difficult solid designs. It is just one of the many ways in which Harris has designed a rotary press for label, quality publication and carton printers.

For instance, a *single cylinder* between units, with the transfer grippers making only one grip and one release, protects register and prevents damage to sheets. *Standard plate cylinders* on this press take plates from existing precision platemaking equipment. The *double-delivery* system gives twice as much drying time for finished sheets. It allows the piles to be unloaded without stopping the press. Harris stream feed and *feed-roll* system give positive control of front register without damage to the sheet.

Quality printing can be made more profitable. May we discuss this with you?

HARRIS-SEYBOLD COMPANY GENERAL OFFICES, CLEVELAND 5, OHIO



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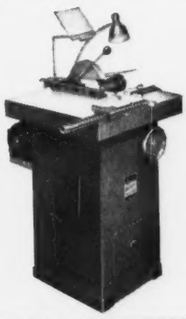
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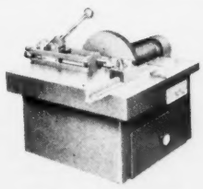
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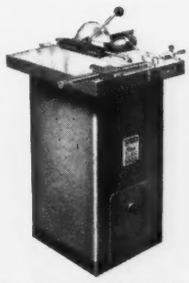
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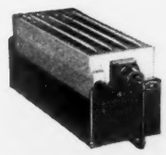
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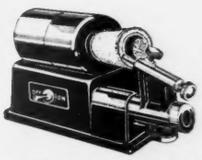
FOOT SWITCH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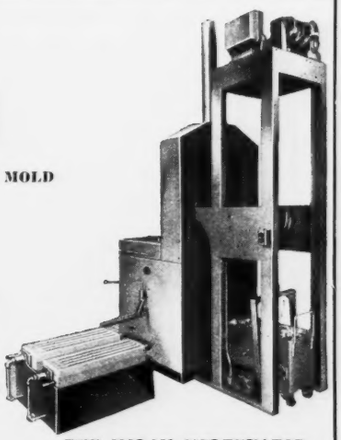
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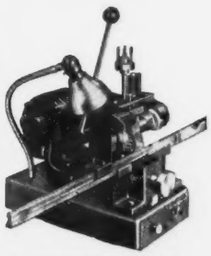
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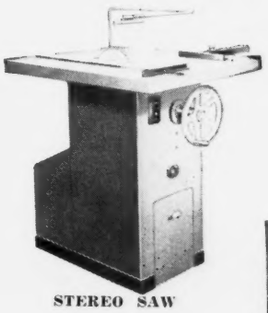
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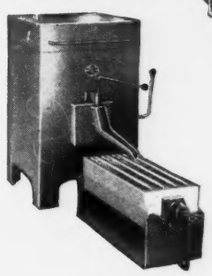
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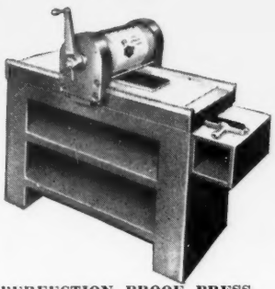
ROUTER PLANER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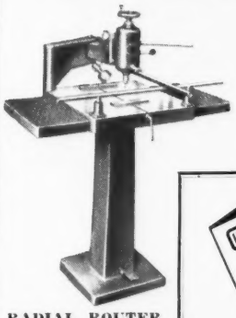
PROOF PRESS

STRIP MATERIAL CABINET

ELEVATING TURTLE

MAKE-UP TURTLE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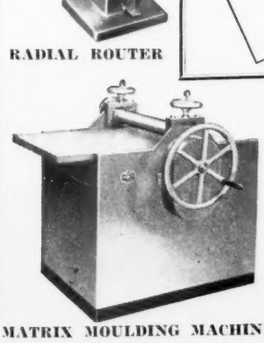
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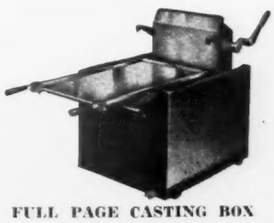
MATRIX DRYER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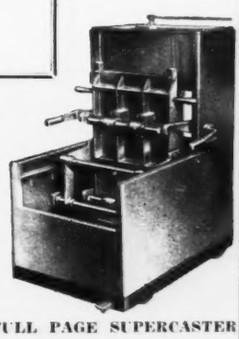
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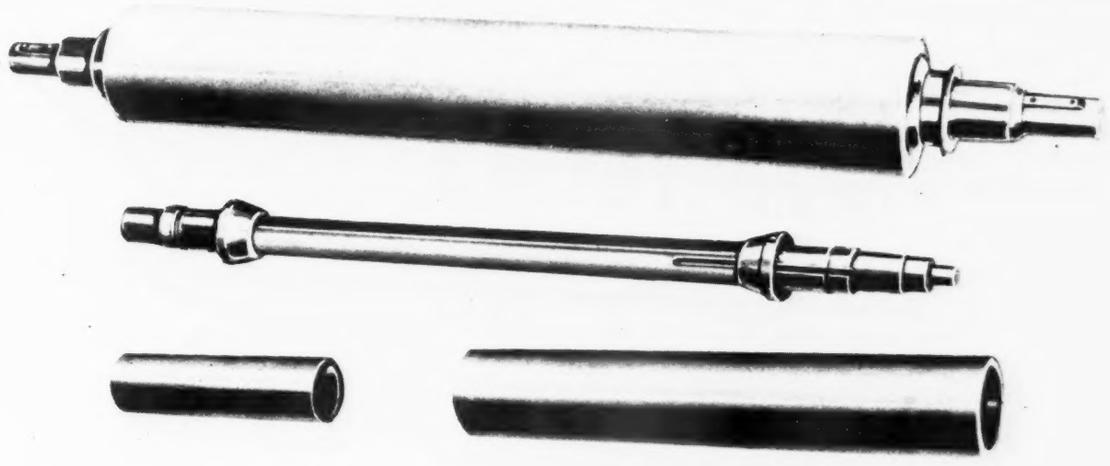

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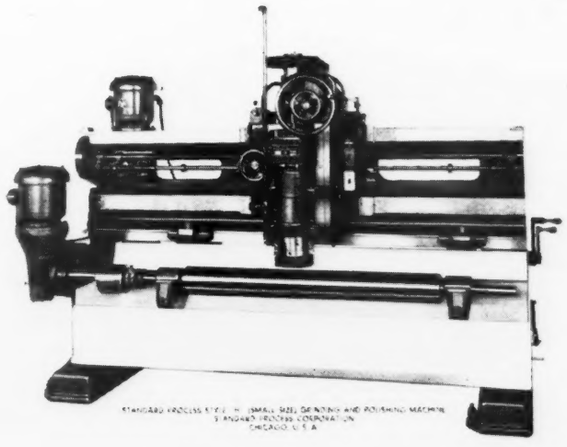

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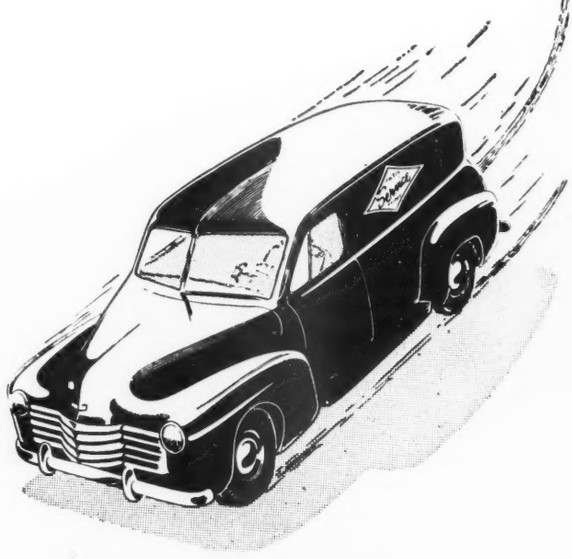

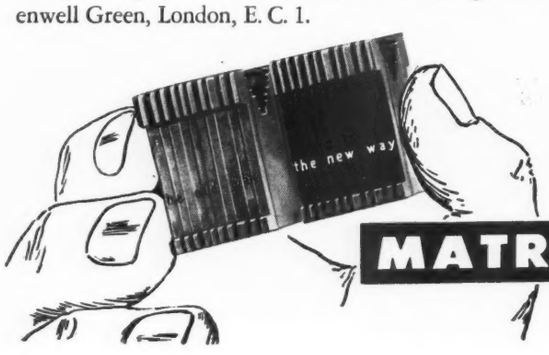

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September 1950

Conveyor-Like Composing Room

Designed for publication and/or book production—All work rolls along from composing machine to form locked in chase.

By ROBERT ROYDEN GREER*

**Printing Engineer, Los Angeles, Calif.*

THE composing room in the average printing plant has been the subject of intensive study for many years by printing engineers and plant executives. The object of these studies, of course, has been to streamline workflow operations much after the fashion of the assembly line procedures of the automobile industry. Since the greater part of composing room work is of the tailor-made variety, it is difficult if not impossible to put all of it on the conveyor belt. However, in commercial composing rooms where the bulk of the work is more or less of standard size and of repetitive occurrence, the writer has worked out a workflow plan which approaches the conveyor belt principle.

In the newspaper composing room, workflow has been very well standardized. But there remains considerable simplification to be accomplished yet. In a future article, the writer will discuss the subject.

Our immediate concern in this article is to discuss a conveyor system in a publication and/or book composing room.

In many publication and book plants there is a maze of cuts, galleys of type, correction proofs, copy, forms, etc. There has been little attempt in these plants to organize procedures which would reduce a border-line state of chaos—and man-hour waste.

Thousands of cuts (dead, standing and live) are parked in many places in the composing room. Ever present are the inevitable and time-wasting searching parties hunting for something to complete the job at hand, or the doing of essential operations needed to accomplish the next step in the operation.

For instance, in proving a job the second time for a customer, a compositor on one occasion carried 200 long galleys from storage rack to proof press and back to storage again a distance of 40 ft. each way. The compositor spent the best part of one day taking those proofs. Half of his time was wasted in walking back and forth from galley rack to proof press—all at so much wage cost per minute.

In another instance, a customer wished to have all his cuts returned the day of his request. There were nearly 500 cuts scattered here and there through the composing room. Gathering the cuts took several compositors from their productive work for the greater part of a day to locate and pack them.

In this same composing room it was noted that the makeup man had to walk half way across the composing room from imposing tables to galley storage to get the pages for each form—or to return the dead pages to the galley cabinets when a form was broken up. One page at a time! What a waste of time and effort! This makeup man did not have room on the imposing table to place galleys except on top of the form itself.

To go into further detail on this profligate waste of manpower and the resultant employee fatigue would add insult to injury. Hour costs soared, production output was low, and management was caught in the middle with a needle-pointed pencil for the estimating department.

The Pilot Model

In the case of one publication and book plant, the writer was consulted with respect to streamlining composing room operations. First, a pilot model of the composing room was devised. A study was made of the costly problems and remedies proposed to make working conditions far more economical and satisfactory.

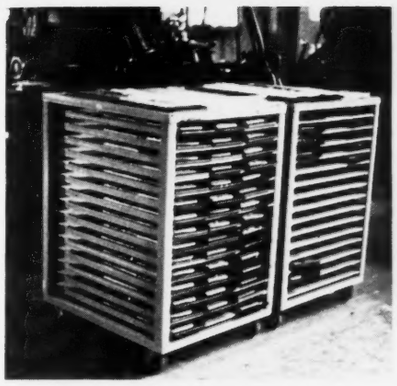


Fig. 2.—View of two of the Rolling Galley Racks designed by Robert Royden Greer, Los Angeles Printing Engineer, for use in a book and/or publication composing room. Once the composition has been proofed and placed in the galley rack (Figs. 3 and 4) it remains there through the galley correction periods. The racks are temporarily stored in Area B, Fig. 1, until they are rolled to the makeup man's position shown in Fig. 5. Through this mobile method of handling many galleys of composition, individual handling of galleys to get them from one place to another is eliminated. In fact, each Rolling Galley Rack holds sixty-four 10x14 galleys of composition.

Rolling Galley Racks

The first and most important equipment item in the new conveyor-like composing room is a mobile galley rack. Please refer to Fig. 2 for descriptive illustration of the unit, and to 4 in Fig. 1 for its location in this particular composing room.

Before we discuss the system in detail, it would be just as well to state that the entire composing room operation "revolves around" the rolling galley racks *4*. Composition is transported from machine to proof press to temporary storage while awaiting corrections, to makeup worktops, to lockup tables by rolling these galley racks from place to place as required.

Composition in galley form and in page madeup form (according to completion of the work) is rolled along. Each publication or book has one or more rolling galley racks assigned to it according to the number of pages in the job. To make identification easy, each rack is numbered and each galley slide is numbered; likewise, each galley of type matter carries the usual identification slug. Thus, the individual toting of galleys from place to place is eliminated, each job is centralized in one or more racks, and identification of all galleys in one job is readily made.

The rolling galley rack, two of which are shown in Fig. 2, is of steel construction. The rack measures 24 in. wide by 29 in. deep by 37 in. high. It is mounted on ball bearing hard rubber casters. The 16 shelves are of plywood. The slides are numbered and hold 48 long 2 col. galleys while collecting composition from the line-composing machine department. Galleys are accessible from two sides of the rack.

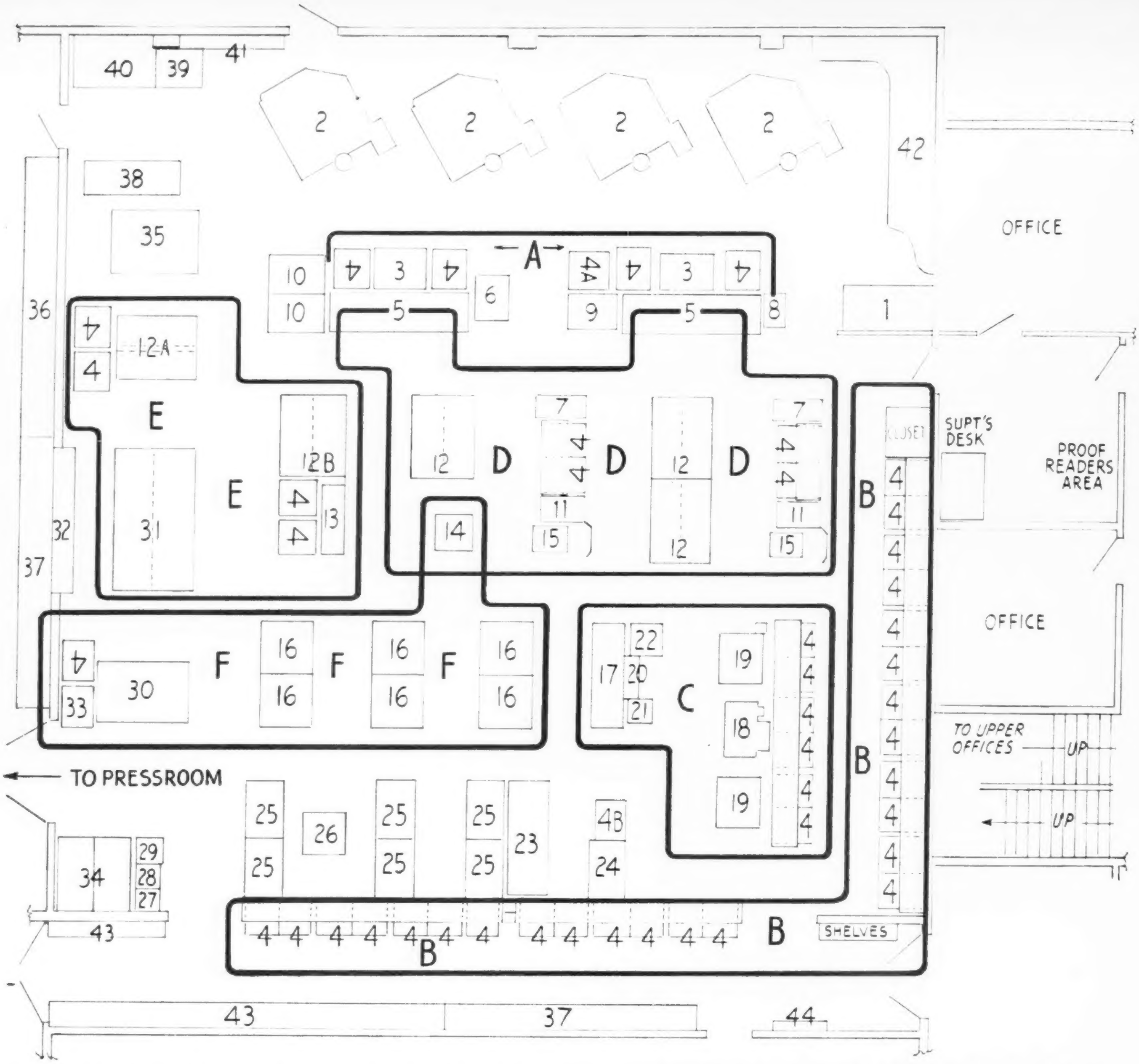


Fig. 1.—Diagram Represents a "Rolling" Book-publication Composing Room Developed by Robert Royden Greer, Los Angeles Printing Engineer.

In this conveyor-like composing room, all production work rolls along from station to station without the necessity for manually toting individual galleys of composition, cuts, and the like from place to place. All composition for a particular publication is rolled along from composing machine, to temporary storage, to page makeup, and to form lockup.

The outlined areas in this diagram are explained as follows: Area A is the composition and original proofing area. Area B is the temporary storage area where galleys for publications are stored temporarily, including the correction of galley proofs. Area C is devoted to display composition. Area D represents the makeup section; galleys of composition in Rolling Galley Racks *4* from Area B are sent to this page makeup area, after which proofs of the pages are pulled on mobile proof presses *7*, after which the Rolling Galley Racks *4* containing the madeup pages are rolled back to Area B to await possible corrections. Area E represents the form imposing section where the madeup pages are imposed into chases. Area F is the job section where work other than publications is handled and made up into chases for the pressroom.

The individually numbered machines and equipment are identified as follows:

1.—Foreman's desk
2.—Line-composing machines
3.—Magazine racks
4.—Rolling galley racks
5.—Steel top banks (galleys and slides below)
6.—Galley proof press at composing machines
7.—Small proof presses on casters
8.—File cabinet
9.—Cabinet for long galleys with dump bank on top
10.—Double col. galleys, (jumbo furniture cabinet on top)
11.—Makeup units
12.—Steel top imposing tables with two 100 galley (12x18) storage beneath
13.—Steel top imposing table with 100 galley (8¾x13) storage underneath
14.—Heavy saw
15.—Saw-trimmers with strip material storage below
16.—Ad man's double cabinets
17.—Double cabinet
18.—Ludlow caster
19.—Ludlow matrix cabinets
20.—Copy bench
21.—Ludlow resurfacer
22.—Rotary mitering machine with strip material storage below
23.—Large proof press
24.—Cut cabinet
25.—Two col. galley cabinets
26.—Heavy wood saw
27.—Water cooler
28.—Hacker type high gauge
29.—Router (small portable)
30.—Steel job imposing table (furniture and galleys below)
31.—56 in. by 96 in. steel top imposing table with galley racks and letterboards below
32.—Assorted wood furniture
33.—Job form rack
34.—Cylinder form rack (for large and small chases)
35.—Lineup table
36.—Dead page storage
37.—Wrapped book pages
38.—Elrod caster
39.—Elrod strip material
40.—Machinist's bench
41.—Meter board
42.—Copy table and proof shelves
43.—Storage for standing pages

Fig. 3.—One of the base storage area Greer Rolling Galley Rack Cabinets set into a line in storage area B, Fig. 1. Corrections for the galleys stored in the Racks are made by the operator and are placed on a galley. The correction slugs and/or type are then carried on a galley to the proper rack in Area B, Fig. 1.

The slides in the rolling galley racks are arranged so that as the pages are made up after the revises are complete the pages are deposited upon the 64 galleys, each 10 x 14. After the pages are made up the 2 col. galleys are placed in an empty rolling rack ready for the next job. Now, the madeup pages on the 10 x 14 galleys remain in the original rolling rack throughout the remainder of the work or until the pages are made up in the form, the rack being rolled directly to imposing table *30*, *31* and *12A* or *12B*, where the madeup pages will be convenient to the stone hand. The pair of rolling racks shown in Fig. 2 each hold 64 galleys 10 x 14. This galley size was arrived at as follows: The $8\frac{3}{4}$ in. x 13 in. size is standard but will not accommodate magazine bleed pages. The 10 x 16 galley is next standard size but is too long for insertion in the slides of the galley rack. The 10 x 14 size galley provides maximum page capacity and fits into minimum space.

Each rolling galley rack is labeled with the name of the publication in large letters on both front and back open sides. It also carried its own rack number which indicates in what position it is to be pushed in the base storage area location, B, Fig. 1. There is room on the flat top to lay cuts or galleys while the rack is in any of its several working positions and the type matter is contained on the storage slides underneath.

Proofing from Rolling Racks

By looking at Diagram Fig. 1, it will be seen that original proofs can be obtained quickly from the galleys at the proof press *6* in Area *A* by rolling rack *1a* in position as shown; or revise proofs can be obtained by rolling one of the small proof presses *7* and *7* (Area D) in front of one of the rolling racks *4*, Fig. 1, in the base storage area *B*, or pages and/or galleys can be proofed from any one of the rolling racks *4* in the base storage area by rolling the rack to the position of rack at *4b* adjacent to the fixed-position large proof press *23*. Proofing is accomplished without running up excessive hour costs and without wasteful leg work.

Base Storage Area

We have explained the mobile galley racks by means of which type in galley or page form is moved from position to position in the composing room. We will now discuss what has been designated as the base storage area. In Fig. 1 this area is designated by the letter *B* and is outlined with the heavy colored line. This base storage area consists of several lines of two-rack cabinets as shown in Fig. 3. Each cabinet will accommodate two rolling galley racks. It has been explained previously that each rolling rack is labeled with the name of the publication. (Some publications make it necessary to label two racks.) Where many color page breakups occur, this is a "must". Also, each rack bears a large number. The two-rack cabinets also are labeled with large numbers. Thus, each rack is rolled into its own proper base (cabinet) position when not in some working position out on the floor.

Fig. 4.—Operator making galley corrections in Area B, Fig. 1. After all galley corrections have been made, the Greer Rolling Galley Rack is rolled to the make-up man's position *4* in Area D. Here the composition is made up into page form.

Two-rack Cabinets

The two-rack storage cabinet indicated in Fig. 1 at *B* and illustrated as a unit in Fig. 3, is of steel construction. In Fig. 3 one rolling rack is shown in position in the lower part of the cabinet, but the space is sufficiently wide to accommodate two rolling galley racks. That part of the cabinet above the rolling galley racks is described as follows: Above the one-tube 48 in. shaded fluorescent light is a steel shelf extending completely across the cabinet width; this shelf is 24 in. deep and is intended for stacking hundreds of dead cuts for the magazine which is assigned to this cabinet. Below the reflector shaded fluorescent lamp is a shelf 18 in. deep for standing cuts which may have future use. Next below is another shelf 12 in. deep; this shelf is intended for new cuts for the current issue of a magazine as they come into the plant from the photoengraver. Every rolling rack has its large quota of cut storage instantly available.

Galley Corrections

In Fig. 4 is shown a printer making galley corrections. Two rolling galley racks are in position in the lower part of the two-rack cabinet. There is ample lighting and visual clearance of all shelves previously described. The light rays are projected downwardly upon the work—not in the printer's eyes.

When the galleys have been set in the line-composing machine department, they are proved immediately on proof press *6*, Fig. 1. The rolling racks are then pushed to their proper stalls in the rack cabinets in the base area *B* without waiting reading or corrections.

The correction slugs are made on the machines, are placed on a galley, and the galley is carried to the proper rack in the base area. The printer lifts each galley out of the rack and places it on the flat top; after inserting the corrected slugs in the proper places as indicated by the proof, a revise proof can be taken immediately, upon a small proof press that has been rolled beside him.

Revise proofs are made right by the rolling rack. For this purpose, a small proof press is mounted on a steel cabinet with two casters mounted off center. It is easy to roll, but is steady when in use. In the cabinet beneath the press are provided ink plate, brayer, paper, gasoline safety can and brush. The proof press is of either the following two types; Vandercook No. 0 or Nolan No. 1. The proof press is rolled right up to the rack cabinet where the corrections and revises are to be made, in the base storage area. This procedure prevents blocking the line-composing machine department, the bank area, or even the other proof presses at *6*, *7* and *23*. This facility also prevents back-tracking galleys into any of the other departments.

The corrected galleys which have been proofed for revises then await final OK to be made up into page dummies.

Orderliness in Cuts

During the interval when the customer's magazine copy is being set and proofing operations are being conducted, incoming cuts from the photoengraver accumulate on the lowest overhead shelf (the 12 in. one described above) directly over the galleys of line-slug composition that have also accumulated for that particular magazine.

Now, if a customer wants a standing cut run three months ago in the current

issue, it will be found on the shelf above the current shelf (that is the middle 18 in. shelf described previously).

If a customer phones: "I am sending my boy over to pick up all our dead cuts," only a little time is required to clear off the top shelf (the 24 in. one described previously) and pack them in cartons or boxes.

This same system can be used irrespective of whether a printing plant handles two publications or 200 publications.

Makeup Area

The next step in production is taken in the makeup area *D*, Fig. 1. This is the area where the pages are made up. The work is performed at the makeup unit with flat top work area as shown in Fig. 5. When the foreman says: "Make up *Radio Magazine*," all materials are ready for the makeup man. The galleys have all been corrected and given final OK, and the live cuts will be found on the lower shelf of the base area cabinet (Fig. 4).

The makeup man rolls the one or two rolling galley racks from the base storage area *B* (Fig. 1) right into the compartment in the lower part of the makeup unit as shown in Fig. 5.

If it be 2-color pages in any heavy quantity—then 2 rolling galley racks are used. The left hand for black key pages, and the right hand one for the mating color pages. This is predicated upon color breakup at time of page makeup.

In a matter of minutes he has moved one (or two if necessary) rolling galley racks into position *D* (Fig. 1) with all cuts for the current issue of *Radio Magazine*. As is shown in Fig. 5, he is supplied with a shadowless overhead lighting fixture. Every conceivable bit of material is at hand and plenty of room in which to work is available.

A saw *15*, mounted upon a strip material cabinet is stationed at the end of the makeup unit in area *D*. In Fig. 5, the saw was removed to show steel construction of the makeup unit. A tray is mounted over back edge of saw to hold short strip cuttings of leads and slugs.

A small proof press *7* is positioned on the left side of the makeup unit; (in Fig. 5 the proof press and saw (*7*, Fig. 1) both have been removed to show construction of makeup unit.) This is mounted upon two casters off center for temporary removal into storage area aisle for proving when needed.

At the other side of the working aisle opposite the makeup unit is a flat-top bank *12* on which the makeup man can lay many galleys from the rolling galley racks *4*, so he can spot articles that may not run in sequence on the galleys and the page dummy.

Underneath bank or makeup table *12* are stored 400 galleys (12x18). These galleys contain new and standing advertisements, holdover editorial matter, special material, etc. This composition is properly located by section for each magazine so that the makeup man can find the material quickly without leaving the aisle.

The Makeup Unit

The makeup unit itself, Fig. 5, is all-steel construction with flat top working surface 40 in. height from the floor. Underneath is space for two rolling galley racks *4* (Fig. 2). A description of this unit is as follows: Importantly, there is suspended above the unit a special cold cathode 4 tube light (tubes are 96 in. length). On top in slanting position is a reservoir shelf for most used leads and slugs. Next underneath in level position is a 2 pt. lead rack. Next underneath is an adjustable slanting rack for large size slugs. Below that is an adjustable slanting rack for 6 pt. and 12 pt. slugs in smaller lengths.

Everything comes to the makeup man; all material and instruments of production are at his finger tips together with maximum glareless light to see what he is doing without fatigue.

He proves each page on his own proof press as he completes each page without any expended footsteps, or waiting for some other compositor to get away from the proof press.

The makeup man can place the lead and slug racks most conveniently as his work demands. If required, the lowest inclined shelf can be provided to hold 6 pt. to 36 pt. quads and spaces with brass and/or copper thin spaces (all sizes) in the center, and leads and slugs from 1½ picas to 9½ picas in ½ pica steps.

Fig. 5.—This illustration shows one of the Rolling Galley Racks *4* (Figs. 1, 2, 3 and 4) underneath the flat working top of the Greer Makeup Unit. All material for makeup into pages is at hand — the composition, cuts, leads, slugs and rules, including folio lines. A saw-trimmer *15* and small proof press *7* (Fig. 1) are positioned conveniently. After the makeup man has finished his work, the madeup pages are replaced in the Rolling Galley Rack and are returned to the Base Storage Area B in Fig. 1, to await possible corrections in the page proofs. When the pages have been OKd, the Rolling Galley Rack is transported to the imposing table *12a*, *12b* or *31*, as indicated in Area E, Fig. 1.

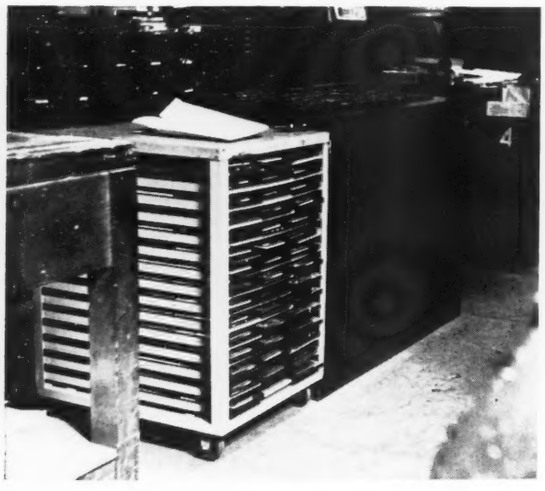


Fig. 6.—View of Greer Rolling Galley Rack containing madeup pages of a publication ready to be locked up into page form on the imposing table.

Imposition

After the makeup man has finished his work, the rolling galley rack containing the made-up pages goes back to storage area awaiting OKs, or if OK, is rolled to imposing table *12a*, *12b* or 31 as shown in Fig. 6. Here the pages are quickly spotted for correct imposition. It will be seen that fast stonework is possible. After the forms have been made up, the rolling galley rack is returned to its position in the base storage area. If it is a short run it can remain at stone, until pages have been all run.

Smooth Steel plates, ¼ in. or $^3/_8$ in. thick, rabbeted on all edges, cover the entire area of each combination of galley racks, *12*, *12A*, *12B* and also *10*, in Fig. 1.

(*Continued on Page 114*)

OFFICERS AND DIRECTORS

National Graphic Arts Expositions, Inc.

Sixth Educational Graphic Arts Exposition
International Amphitheatre, Chicago, September 11 to 23 inclusive

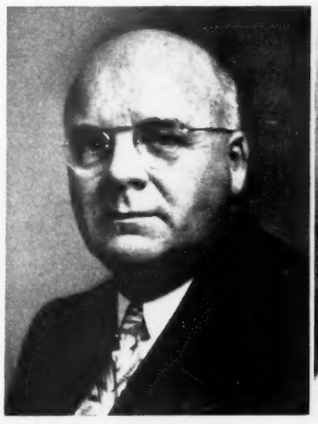
Here are the portraits of the Officers and Directors of National Graphic Arts Expositions, Inc. This organization and the men represented in the official family have spent a great deal of time and thought in putting over a $20 million printing equipment and supplies exposition.

All of these men are well known in one or more segments of the Graphic Arts industry. Most of them are engaged in the business of producing various kinds of printing for customers; some of them are engaged in furnishing services to the trade; five of them are engaged in the manufacture of printing equipment.

These men, with the support of the National Printing Equipment Association members, as well as many other equipment and supplies manufacturers and/or dealers are responsible for what is the largest exposition of its kind ever held.

It is characteristic of this type of men that in addition to supervising their own organizations, they find time enough to render what might be called a public service to the Graphic Arts industry. For these services, printing executives should be grateful.

If you don't know them, by all means get acquainted—they like to know people in the Graphic Arts.



A. E. GIEGENGACK
President

Also Executive Vice Pres. Lanston Monotype Machine Co. Philadelphia.

FRED W. HOCH
Senior Vice President

Also President, Fred W. Hoch Associates, Inc., New York.

GRADIE OAKES
Vice President

Also President Process Color Plate Co., Chicago.

CARL E. DUNNAGAN
Vice President

Also President, The Inland Press of Chicago.

R. VERNE MITCHELL
Vice President

Also Chairman of the Board, Harris-Seybold Co., Cleveland.

EDWARD CHRISTENSEN
Treasurer

Also Typography Consultant W. F. Hall Printing Co., Chicago.

S. FRANK BEATTY
Secretary

Also General Mgr., Graphic Arts Association of Illinois.

NEAL DOW BECKER
Director

Also President, Intertype Corporation, Brooklyn.

DONALD C. BROCK
Director

Also President, Brock & Rankin, Inc. Representative Employing Bookbinders of America and the Book Mfrs. Institute.

PAUL C. CLOVIS
Director

Also President, Twentieth Century Press, Chicago. President, Graphic Arts Assoc. of Ill.

J. E. EDDY
Director

Also President, Miehle Printing Press & Mfg. Co., Chicago.

RUSSELL J. HOGAN
Director

Also President, The Wilson H. Lee Co., Orange, Conn. Also President, IAPH Craftsmen.

ALLERTON H. JEFFRIES
Director

Jeffries Banknote Co., Los Angeles. Also President, PIA.

MYRON F. LEWIS
Director

Also President, Printing Trades Blue Book of N. Y., Inc.

FREDERICK H. LUTZ
Director

Also President, Frederick H. Lutz, Brockton, Mass. Also President, ITCA

LESTER A. NEUMANN
Director

Also President, M&L Typesetting and Electrotyping Co., Chicago. Represents IPSS Guild.

JOSEPH J. SKACH
Director

Also an Executive of Esquire, Inc., Chicago.

CHARLES C. WALDEN, Jr.
Director

Also President, Walden Sons & Mott, Inc., New York.

EDWARD G. WILLIAMS
Director

Also President, American Type Founders, Inc. Also Director, NPEA.

RUSSELL H. HERRELL
Assistant to the President

National Graphic Arts Expositions, Inc.

OFFICERS AND DIRECTORS

National Printing Equipment Association, Inc.

Many printing plant executives know little or nothing about the National Printing Equipment Assoc., Inc. This is understandable. The reason is that its Officers, Directors and Membership move unobtrusively and shun the spotlight. The NPEA, however, is a substantial segment among Graphic Arts associations. Its membership is composed of executives of equipment and supply manufacturers, suppliers and dealers to printing and service plants of all types. The NPEA was born in the gloomy days when American business was prostrated and economic conditions made it appear that, like other American industries, it was necessary to have unified industry action. At the time of its founding, the businesses of printers, publishers, typesetters, binderies and other services were in a deplorable state, including the businesses of printing equipment manufacturers and suppliers.

At the time of organization, the aims and objectives of the National Printing Equipment Assoc. were stated to be: "The Association desires to cooperate in every way with the consumers of the products of its members in promoting, fostering and advancing the interests of publishers, printers, lithographers, binders, carton manufacturers, etc., in every phase of the Graphic Arts Industry."

The NPEA has functioned admirably during its seventeen year existence. Its members support technological research so that you may have modern equipment and supplies with which to work. The Association supports technical educational schools in which future printers and printing executives are trained.

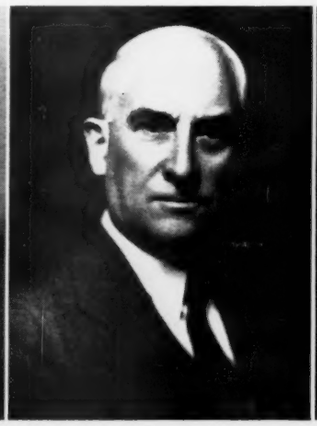
Usually, its annual Directors' and Membership meetings are held during Printing Industry of America convention days.

R. V. MITCHELL
President and Director

Also Chairman of the Board, Harris-Seybold Co.

OSCAR C. ROESEN
Vice President and Director

Also President, Wood Newspaper Machinery Co.



JAMES E. BENNET
Secretary and Director

FRED S. TIPSON
Treasurer and Director

Also Treasurer, T.W. & C.B. Sheridan Co.

JOSEPH L. AUER
Director

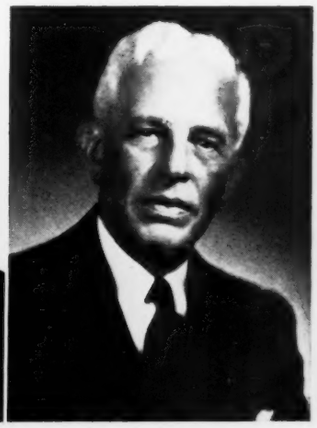
Also President, R. Hoe & Co.

R. C. CORLETT
Director

Also President, The Goss Printing Press Co.

JOSEPH F. COSTELLO
Director

Also President, Lanston Monotype Machine Co.



DONALD C. COTTRELL
Director

Also President, C. B. Cottrell & Sons Co.

JOHN E. EDDY
Director

Also President, Miehle Printing Press & Mfg. Co.

B. S. HANSON
Director

Also Manager, The Challenge Machinery Co.

PHILLIP P. MERRILL
Director

Also Executive Vice President, Ludlow Typograph Co.

GORDON MONTGOMERY
Director

Also President, Miller Printing Machinery Co.

MARTIN M. REED
Director

Also President, Mergenthaler Linotype Co.

HAROLD T. SIMPSON
Director

Also President, Printing Machinery Co.

WALTER A. SITTIG
Director

Also General Manager, H. B. Rouse & Co.

The 1950 annual meeting of the National Printing Equipment Association, Inc., will be held at the Palmer House, Chicago, Sept. 19 at 2 p.m. The Directors' meeting will be held preceding the members' meeting at 10 o'clock a.m. on the same day. No announcement has been made as to the matters which will be taken up during Directors' or Members' meetings.

The Officers, Directors and Members of the National Printing Equipment Association, Inc., are solidly behind the Sixth Educational Graphic Arts Exposition being held at Chicago's International Amphitheatre, September 11 through 23 inclusive. Just about every type and kind of printing equipment manufacturer is represented in the Association.

Of the original list of Directors when the Association was founded in 1933, two still remain to serve the NPEA in an executive capacity. These are R. V. Mitchell, Harris-Seybold-Co., now the Association's President, and James E. Bennet who has served continuously as Secretary.

All of these men are approachable. By all means, make it a point to meet them personally at the Exposition.

EDWARD G. WILLIAMS
Director

Also President, American Type Founders, Inc.

HARRY G. WILLNUS
Director

Also Vice President, Intertype Corporation.

Officers, Governors and Representatives Intl. Association Printing House Craftsmen

•

RUSSELL J. HOGAN, President. (Also President, Wilson H. Lee Co., Orange, Conn.)

FRED C. BAILLIE, First Vice President. (Also Superintendent, Canadian Bank Note Co., Ottawa, Can.)

J. HOMER WINKLER, Second Vice President. (Also Technical Advisor, Battelle Memorial Institute, Columbus, O.)

GORDON J. HOLMQUIST, Third Vice President. (Also Partner, Cole-Holmquist Press, Los Angeles)

EDWARD T. SAMUEL, Treasurer. (Also President, Edw. T. Samuel, Printers, Cleveland)

GRADIE OAKES, Immediate Past President. (Also President, Process Color Plate Co., Chicago, and General Chairman, 1950 Intl. Convention, Chicago)

TOM MAHONEY, Chairman, Technical Commission. (Also Plant Mgr., Regensteiner Corp., Chicago)

PEARL E. OLDT, Intl. Executive Secretary. (Also Chairman, Intl. Publications Commission, Cincinnati, O.)

1950 Craftsmen's Convention

These are the men who give liberally of their time and money to make the Intl. Association of Printing House Craftsmen a successful technical society. In performing their duties, they must do considerable traveling. They are away from their executive duties meanwhile. Through these pages, meet them all.

The 1950 convention is being held at Chicago's Hotel Stevens, Sept. 10 to 13 incl. This year's convention is being held concurrently with the Sixth Educational Graphic Arts Exposition, Chicago, at the International Amphitheatre.

An excellent technical and entertainment program has been prepared and plenty of time during convention days has been allotted so that delegates may attend the Exposition, where the newest developments in equipment and supplies will be exhibited and demonstrated.

AMADEO TOMMASINI, Chairman, Intl. Public Relations Commission. (Also Manager, University of California Press, Berkeley)

MICHAEL R. STEVENS, Chairman, Intl. Membership Commission. (Also General Mgr., John E. Weiss & Son, Inc., New York, N. Y.)

HOWARD N. KING, Intl. Representative-at-Large. (Also Vice President, The Maple Press, York, Pa.)

DeWITT A. PATTERSON, Foreign Representative. (Also Plant Supt., Color Engravers Div., Also Gravure, Chicago)

WILLIAM McLELLAN, First District Representative. (Also Sales Representative, Wild & Stevens, Inc., Boston)

FIRST DISTRICT—Boston, Connecticut Valley, Merrimac Valley, New Haven District, Providence, Worcester County.

GEORGE KEDERSHA, Second District Representative. (Also Sales Representative, Gaetjens, Berger & Wirth, Brooklyn)

SECOND DISTRICT—Adirondack, Albany, New York, Newark, Northern New York, Syracuse, Utica.

ALBERT L. KOLB, Third District Representative. (Also Manager, Printing Dept., Marine Trust Co., Buffalo, N. Y.)

THIRD DISTRICT—Buffalo, Hamilton, London, Montreal, Ottawa, Rochester, Toronto.

HARRY CHRISTOPHER, Fourth District Representative. (Also President, Paper Supply Co., Baltimore, Md.)

FOURTH DISTRICT—Baltimore, Lehigh Valley, Philadelphia, Richmond, Washington, York.

JOHN OSIAS, Deputy Fourth District Representative. (Also Manager, Richmond Branch, International Printing Ink Div., Interchemical Corp., Richmond, Va.)

ALVIN F. FRIEDRICH, Fifth District Representative. (Also Vice President, Process Color Plate Co., Chicago)

FIFTH DISTRICT—Cincinnati, Cleveland, Columbus, Dayton, Detroit, Erie, Fort Wayne, Grand Rapids, Indianapolis, Lansing, Louisville, Pittsburgh, Michiana, South Bend, Toledo.

JOHN MOREHOUSE, Deputy Fifth District Representative. (Also Central District Sales Mgr., Harris-Seybold Co., Cleveland)

FIELDING A. UTZ, Sixth District Representative. (Also President, Milwaukee Printers' Roller Co., Milwaukee, Wis.)

SIXTH DISTRICT—Chicago, Five County Milwaukee-Racine, Rock River Valley.

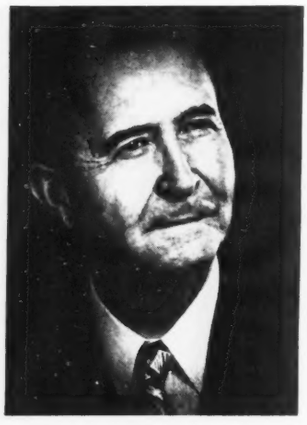
FRED L. BRYANT, Seventh District Representative. (Also Southeastern Representative, Miehle Printing Press & Mfg. Co., Chicago)

SEVENTH DISTRICT—Atlanta, Jacksonville, Little Rock, Memphis, Miami, Nashville.

G. ELMER LEACH, Eighth District Representative. (Also Owner, Leach The Printer in Des Moines, Ia.)

EIGHTH DISTRICT—Cedar Rapids, Central Illinois, Des Moines, Kansas City, Omaha, St. Louis, Topeka, Tulsa, Waterloo, Wichita.

ROYCE KENT, Deputy Eighth District Representative. (Also Asst. Supt., Bemis Bros. Bag Co., Omaha, Neb.)



JOHN A. SCOTT, Ninth District Representative. (Also President, John A. Scott Co., Inc., Dallas, Tex.)

NINTH DISTRICT—Dallas, Fort Worth, Houston, Oklahoma City, San Antonio.

RONALD HULL, Tenth District Representative. (Also Branch Mgr., Sears Limited, Toronto, Ont., Can.)

TENTH DISTRICT—Blue Mountain, Calgary, Edmonton, Portland (Ore.), Seattle, Southwest Idaho, Vancouver.

HAYWOOD HUNT, Eleventh District Representative. (Also Owner of Haywood H. Hunt, Typographer and Printer, San Francisco.)

ELEVENTH DISTRICT—Honolulu, San Francisco, Sacramento.

LEE FARMER, Twelfth District Representative. (Also President, Pacific Printing Ink Co., Los Angeles)

TWELFTH DISTRICT—Albuquerque, Citrus Belt, Los Angeles, Orange County, Phoenix, Santa Barbara, San Fernando Valley.

HERBERT THRELFALL, Thirteenth District Representative. (Also President, John F. Greene Co., Inc., Printers, Providence, R. I.)

THIRTEENTH DISTRICT—Cape Town (S.A.) and Havana, Cuba.

RUSSELL HIGNELL, Fourteenth District Representative. (Also President, Hignell Printing Ltd., Winnipeg, Manitoba, Can.)

FOURTEENTH DISTRICT—Duluth-Superior, Minneapolis, Regina, St. Paul, Winnipeg.

MANNIE HUBBELL, International Historian. (Also Production Dept., Neely Printing Co., Chicago)

HAROLD G. CRANKSHAW, Chairman Club Bulletin Contest. (Also Printing Instructor, Washington, D. C., Public School System)

Craftsman Thumb-Nail Sketches

These Thumb-Nail Sketches are about Board of Governor personalities of the International Association of Printing House Craftsmen —those men whose biographies have not been printed previously in *Printing Equipment Engineer*. Each year, a number of new faces appear on the Board. Consequently, Craftsmen who have not met the new Officers may learn something about them from both the portraits and these sketches.

Intl. Membership

MICHAEL ROBERT STEVENS

Michael Robert Stevens is a familiar personality at International Conventions. His enthusiasm for Craftsmanship never runs out. In fact, he overflows with it. Anyhow, Mike is General Manager for John E. Weiss & Son, Inc., New York, N. Y. He likes layout, selling and plant management. He's a Past President of the Club of Printing House Craftsmen of New York, Inc. Formerly, he was associated with Harbor Press for 15 years and was a Vice President. He also was associated with the famous Marchbanks Press in New York as Composing Room Foreman. He completed his education after graduating from high school by taking special evening college courses in New York. His hobbies are two—boating and fishing.

Intl. Representative-at-Large

HOWARD N. KING

Howard N. King has addressed just about every Craftsman's Club. Probably he is as well or better known, than any other figure in the Graphic Arts because of the diverse groups to which he has talked under the auspices of Intertype Corporation — Craftsmen, employing printers, advertising clubs, schools, production clubs, newspaper mechanical conferences and others. His messages are always full of meat with respect to type styling, layout and design. He is Vice President of The Maple Press, York, Pa. Many Craftsmen already know about his talent as a book designer. He is a Past President of the York Club. His is a busy life.

1st District

WILLIAM McLELLAN

In some districts, the International representative is connected in a sales capacity with some manufacturer or supplier, the reason being that not only is he willing to help Craftsmanship but by virtue of his job he is in a position to visit all clubs in his district. William McLellan is a sales representative for Wild & Stevens, Inc., roller manufacturers, Boston. Previously, McLellan has been a compositor, pressman, wax engraver, offset platemaker and letterpress foreman. He is a member of the Connecticut Valley Club. He has served the club as treasurer, vice president and president. Earlier in his career, he mistakenly joined the carpentry class in the Holyoke Grammar Schools. During two years' attendance, it is said he didn't complete a single item. He commenced to click, however, when he joined the first printing class formed in the Holyoke Schools. Has been identified with printing activities ever since.

2nd District

GEORGE KERDESHA

George Kedersha has remained with one company for a span of fifteen years. He's with Gaetjens, Berger & Wirth, Inc., ink makers in Brooklyn, N. Y. Is now active as sales representative. He finds time to serve the International as Second District Representative. He is a member of the Newark Craftsmen's Club. He started with GB&W, Inc. in the laboratory, matching colors, formulating ink, and tackled research connected with ink making. He attended Newark College of Engineering for six months before entering the U. S. Armed Service in 1942. He was married recently. His hobbies are photography—both movies and 35 mm. Wm. L. Reinhart is Deputy Second District Representative.

3rd District

ALBERT L. KOLB

Albert L. Kolb is a candidate for election to the office of Intl. Treasurer at the Chicago 1950 convention, the present Treasurer, Edward T. Samuel, having exhausted his constitutional term in office. Kolb got into the printing game early (at 13), first in a shop owned by his father, then in a number of other Buffalo (N.Y.) shops until World War I, when he was with Base Hospital No. 5, U. S. Medical Corps. He organized the printing department of the Marine Trust Co. at Buffalo, of which he has been manager for 30 years. He has served the Buffalo club as Treasurer in 1941, Vice President in 1942, and as President 1943-1944. Previously, he was Third District Representative in 1945. He was again appointed Representative for the year 1949-1950. He is married and has three daughters and two granddaughters. He's active in Buffalo Automobile and Advertising Clubs.

4th District

JOHN OSIAS (Deputy)

Fourth District's Representative is Harry Christopher and his deputy is John Osias who resides in Richmond, Va. He's Manager of Richmond Branch,

International Printing Ink Div. of Interchemical Corp. He has been associated with this company for 17 years. He has served the industry as executive and engineer. Previously, he was associated with several ink manufacturing companies in Norwood (Mass.), Cincinnati and Philadelphia. After completing a course in chemistry, he seriously went to work. He has served the Richmond Club as Secretary and President. In addition to being a Craftsman, he is also a member of the Kiwanis Club and the Masonic Order.

7th District

FRED L. BRYANT

Fred L. Bryant is Southeastern Representative for Miehle Printing Press & Mfg. Co. He is a member of the Atlanta (Ga.) Club., of which he has been President and also President of the Seventh District. He has been with Miehle for the past four years. Previously, he was associated with Atlanta's Foote & Davis Co. and the Ruralist Press, Inc. Before becoming identified with Miehle he had 27 years practical plant experience working on the case, serving as composing room foreman and on production. He likes golf and fishing.

8th District

ROYCE N. KENT (Deputy)

Royce N. Kent is Deputy 8th District Representative. G. Elmer Leach is District Representative. He is Assistant Supt. of the Bemis Bros. Bag Co., in Omaha, Neb. He attended University of Omaha and his formal education included work in electrical and mechanical engineering and cost accounting. After finishing school, he worked four years with T. F. McPherson on composing room surveys on a number of papers including Omaha (Neb.) *World-Herald*, Detroit *News*, Des Moines (Ia.) *Register*, St. Louis *Post-Dispatch*, Cleveland *News*, *Plain Dealer* and *Press* and other newspapers. His present work with Bemis includes plant engineering, cost accounting and other duties in connection with printing and manufacturing paper and textile shipping bags. He served the Omaha Club two years as its President and was a member of the Board of Governors for three years. His hobbies include yachting and water activities and Sea Scouts (BSA).

9th District

JOHN A. SCOTT

J. A. Scott is President of John A. Scott Co., Inc., Dallas (Tex.) Typesetters and Mechanical Platemakers. Six years ago, he organized the company which alone does $300 thousand worth of typesetting annually. In connection with his company's business, Scott is particularly interested in high class color jobs for letterpress printing. Formerly, Scott engaged in daily newspaper work, then became a trade compositor, owning the Fort Worth (Tex.) Linotyping Co. He also has been publisher of small-town papers and commercial printing plants. He has pioneered in the production of plastic printing plates for duplicate forms. His plant employs 42 people; the plant itself occupies 7500 sq. ft. floor space and is located in a modern air-conditioned building. The firm now produces, in addition to typesetting, mats, stereotypes and plastic plates, specializing in publication and agency work. He insists on quality at all times; his plant is supplied with finest equipment available. We again point to the expansiveness necessary to being Intl. Representative of a section of the U. S. where long trips are necessary to get from "here to there" in the discharge of International duties. That condition takes real Craftsmanship.

10th District

RONALD HULL

The Tenth District Intl. Representative, Ronald A. Hull, is British Columbia Representative for Sears Limited of Toronto (Can.). His district is comprised of Seattle, Portland (Ore.), Vancouver, Southwest Idaho, Blue Mountain, Calgary and Edmonton Clubs. His education was received in Vancouver night and technical schools. He has progressed through the positions of pressman, compositor, bindery foreman, and plant superintendent. For eight years he was factory and building superintendent at Smith, Davidson & Wright Ltd., Vancouver. He has been associated with Sears Limited for the past five years. He is a past president of the Vancouver Club.

12th District

LEE FARMER

Lee Farmer is President and Pacific Coast Mgr. of Pacific Printing Ink Co., Los Angeles. In addition to being 12th District Intl. Representative, he is a member of the Los Angeles Kiwanis Club. He has served the ink manufacturing industry in color matching, sales and management capacities. Previously, he was sales representative for Geo. H. Morrill Co., Ault & Wiborg and Sales Mgr. for International Printing Ink in Los Angeles and San Francisco. His firm represents the Fred'k H. Levey inks on the Pacific coast. His one hobby is amateur photography. Associates swear he's pretty good at picture-taking. Blair Lord Twelfth District Deputy Representative.

14th District

RUSSELL HIGNELL

The Winnipeg (Can.) Club of Printing House Craftsmen is glad that one of its Past Presidents is Fourteenth District Representative. Russell Hignell is President of Hignell Printing Ltd., in Winnipeg. In his business he likes the planning end best. Company operates both letterpress and offset equipment. Current hobbies are boating and camping. He also likes a well-seasoned briar pipe. His company is a durable one—it's 40 years of age.

ITCA Research Bulletin

As part of his service to members of the Intl. Trade Composition Assoc., Executive Secretary Frank M. Sherman has issued Research Bulletin No. 6. In the bulletin are discussed factors in reproduction proofing, papers and inks for such proofing, including transparent sheets and inks for transparent sheet reproduction proofing. Dusting of proofs and plastic coating are also discussed. While the bulletin cannot really be construed as a research effort, yet a lot of work was involved in getting together the information for the benefit of ITCA members. The bulletin should be valuable to ITCA members. Further information concerning Bulletin No. 6 may be obtained by addressing Mr. Sherman at 1015 Chestnut St., Philadelphia 7, Pa.

Weight Correction

In the article *Magnesium Honeycomb Base* appearing on page 39 in the August issue, it was erroneously stated that the weight of the magnesium base was 0.036 oz./sq. in. The correct figure is 0.306 ox. /sq. in. The Magnesium Sterling Toggle Base is manufactured by The Printing Machinery Co.

MLCo Atlanta Agency

Harry W. Porte, Vice President in Charge of Sales for Mergenthaler Linotype Co., has announced the appointment of Joe F. Schuman as Manager of the company's recently established Atlanta, Ga., sales and service agency. The new agency is located at 300 Luckie St. Mr. Schuman was formerly in charge of the New Orleans Linotype agency. Other personnel located at the Atlanta agency will include Harold F. Bott, who will handle sales service, and Paul G. Poynor, in charge of sales promotion.

Joe F. Schuman, Manager of Mergenthaler Linotype Co.'s Atlanta agency.

Exposition Previews

Cont. on Next Page

Pre-views of manufacturer and supplier exhibits to be seen at the National Graphic Arts Exposition being held in Chicago's International Amphitheatre, September 11 to 23, are published for executive readers who will be attending the Show.

Acme Steel Co. Stitchers — In its display space No. 174, Acme Steel Co. will display and demonstrate a number of its models of book stitchers. Included in the group will be a Model A Acme-Champion with ¼ in. capacity single head stitcher; a Model P doublehead ¼ in. capacity stitcher; an Acme-Morrison ¾ in. capacity stitcher and an Acme-Morrison 2½ in. capacity stitcher. Also on exhibit will be an Acme Silverstitcher for stitching corrugated and fibre shipping containers. Acme Steelstrap for reinforcing shipping containers, bundling, and the like, will be demonstrated.

Indexes, Tabs & Specialties If you have wondered from time to time where you may obtain those clever celluloided indexes which make it convenient for you to quickly locate any section of a directory, catalog or reference work, you can find the full line of such at Booth No. 302 occupied by G. J. Aigner Co., whose regular place of business is at 426 So. Clinton St., Chicago 7. In addition, Aigner will show various kinds of tabs made from real and simulated leather, and celluloid; ring book and post binder indexes; insertable tabbing and other specialties, including cellulose sheet protectors.

American Type Founders American Type Founders has scheduled nine ATF sheetfed presses for exhibition at Display Space Nos. 130-133 incl., 244-260 incl. and 268-272 incl., according to E. G. Williams, ATF president. The presses, which will be in operation, will include three Kellys, a Little Giant and five offset presses.

An ATF-Webendorfer web-fed offset press will also be on the floor, operated commercially on a four-color job by a Chicago printer. A complete photomechanical department will be set up, including cameras and an ATF-Hadego photo composition machine.

European type as well as many ATF type faces will be included in a special exhibit. Developments in the educational use of printing will be covered in a separate section. ATF also plans to install a facsimile engineering department, with engineering personnel doing actual printing plant designing and drafting. These engineers will be available for consultation with show visitors on their own specific problems.

American Evatype Corp. will exhibit at Display Space No. 403.

The American Printer will exhibit at Display Space No. 307.

American Roller Co. will exhibit at Display Space No. 175.

The American Steel Chase Co. will exhibit at Display Space No. 313.

American Wood Type Mfg. Co. Rube Mandel, President, will be in charge of the exhibit sponsored by American Wood Type Mfg. Co. at Display Space No. 226. The background of the exhibit will consist of a display listing American Wood Type and National Numbering Machine products. Included will be samples of the Duralumin lightweight metal furniture. The front of the booth will feature two showcases displaying wood reglet, furniture, cutting sticks, wood type, National perforators, National numbering machines, etc.

Anchor Chemical Co., Inc., will exhibit at Display Space No. 208.

Artype, Inc., will exhibit at Display Space No. 297.

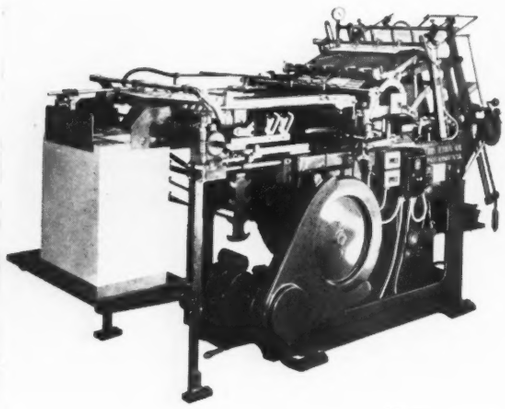
Talisman Offset Press To be shown in operation at the Exposition will be Babcock Printing Press Corp.'s Talisman Offset Printing Press. Babcock will occupy display space No. 149. The press will be shown publicly for the first time. It is 19½ in. by 25½ in. max. sheet size and is rated at 7000 i.p.h. Max. printing area is 19 in. by 25 in. Press is equipped with automatic pneumatic rotary type feeder equipped with device for preventing more than one sheet being fed at a time. Ink distribution consists of 4 vibrating ink drums, 2 rider rollers, 6 distributors, 1 ductor roller, 3 form rollers, 1 fountain roller 2½ in. diam.

In attendance at Babcock's display space will be Joe J. Babbo, Sales and Adv. Mgr., and George S. Backus and Ted P. Robison, also of the sales and advertising department.

Banthin Cylinder Presses Two Banthin 13 in. by 20 in. Horizontal Cylinder Presses will be in operation at Exhibit Space No. 160, sponsored by Banthin Engineering Co. The press has speeds of 2600, 3200 and 3800 i.p.h. Floor space required, 38 in. by 94 in.

Scale Model of American Type Founders' Display at Exposition — The model was built by Donald Deskey, industrial designer. Left to right: Robert G. Marquardt, ATF Vice President; Edward G. Williams, President; Bradford T. Blauvelt, Executive Vice President; Donald Deskey; Frank G. Gerhart, ATF Advertising Mgr.

At the ATF Exhibit, of which this three-dimensional model is the forerunner, will be shown 200 thousand lbs. of printing machinery and equipment, worth nearly $500 thousand. An ATF-Webendorfer 4-color open-web offset press will be operated on a color job by its new owner, the Schultz Litho Co., Chicago. After the show, the press will be installed in the Schultz Co.'s new building.



The Banthin 13 in. by 20 in. Horizontal Cylinder Press will be in operation at the exhibit sponsored by Banthin Engineering Co., Display Space No. 160.

Specifications: max. sheet size, 13 in. by 20 in.; min. sheet size, 3¼ in. by 5½ in.; printing area, 13 in. by 19 in.; chase size, 13⅝ in. by 19⅜ in.; stock range, onionskin to 4-ply cardboard; main drive motor, 1 h.p.; vacuum motor, ½ h.p.; feeder capacity, 12 in. of stock, and delivery capacity, 27 in. of stock. At the exhibit, J. F. Banthin, sr., will be in charge of demonstrations and G. J. Stickley will be in charge of sales promotion.

Cyclone Platemaker — Two table model platemaking machines designed for molding stereotype mats and rubber plates under hydraulic pressure will be exhibited by Addressing Machine & Equipment Co. at Display Space No. 159. Designated the Cyclone Platemaker, the machines are available with 9 in. by 10 in. and 10 in. by 12 in. platens. Sponsor states the machines will produce finished plates in 20 min. for use on rotary and flat bed presses, as well as on Multilith, Davidson and Multigraph presses. The company will also display a Printing Multigraph with Cyclone Continuous Feed.

Battelle Memorial Institute — In keeping with the theme of the Exposition, Battelle's exhibit in Display Space No. 213 will emphasize the improved understanding and technology of many phases of printing production which technical research makes possible. The backdrop will pictorially present the general fields of Battelle's activities, and certain aspects of graphic arts research. This will be amplified by the Admatic Projector, set near the aisle, showing continuously a series of full-color views of work in progress in various Battelle laboratories. Along one side of the booth will be displayed several of the practical results of Battelle research for the printing and publishing industries. Included will be the XeroX Copier, samples of Xeroprinting, Hot-melt Adhesive Bindings, the PRR Duplex Rotometer, the PER Copper Colorimeter, samples of edge gilding on cards and books, plastic electrotype molds, and other items. J. Homer Winkler, Technical Advisor in the Graphic Arts Research Div., will have general charge of the exhibit, and will be assisted by other members of the division.

Beall Vertical Service — Accessories and rebuilt units for the Miehle Vertical Press will be exhibited by Jack Beall Vertical Service at Display Space No. 111. A redesigned double-roll device for Miehle Vertical and M-29 presses will also be shown. Other equipment to be displayed will include the Beall 10-W belts, Acme gas and electric heaters, Acme perforators and Keene back stops. Jack Beall will be in charge of the exhibit.

Bingham Brothers Co. will exhibit at Display Space No. 176 and 178.

Sam'l Bingham's Son Mfg. Co. — A comprehensive display of different types of printing press rollers will be found at Exhibit Space No. 284, sponsored by Sam'l Bingham's Son Mfg. Co. Users of rollers are invited to visit the Chicago factory to see first hand how printing press rollers are made. The following personnel will be in attendance at the exhibit: Carl G. Bingham, Don E. Crews, John H. Feldkamp, M. G. Helvey, J. T. and J. W. Monahan, T. C. Ringman, J. W. Ruzicka, A. H. Shopnitz, W. E. Neely, L. C. Strom, Paul Krueger, R. G. Turnquist and Roy Lawrence. Also J. A. Stambersky, Wm. L. Klein, John W. Webb, J. M. Upton, Frank Morrone, J. J. Donahue, Roy H. Gydesen, George F. Jones, R. T. Waugh, Robert G. Dunn and R. H. Wetherbee.

Bookbinding and Book Production will exhibit at Display Space No. 301.

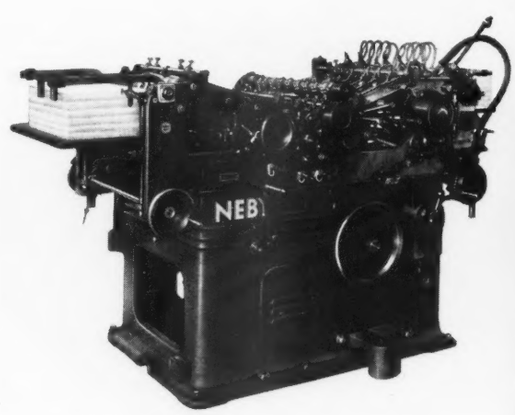
Blatchford Div., National Lead Co. will exhibit at Display Space No. 357.

Bourges Process — Original art work, reproductions and newspaper proofs of work done in two and four-colors by the Bourges Colotone Process will be exhibited at Booth 294 by Bourges, Inc. Also on display will be color transparencies which have been corrected by the application of Colotone, Solotone and Transopaque masking sheets.

To advise interested printing executives on the uses of the Bourges process, Albert R. Bourges, President of the firm, and Mrs. J. Bourges Mayfield, Vice President, will be present at the exhibit.

Bunn Tying Machines — The Bunn Mail Tying Machine will be exhibited by B. H. Bunn Co. at Display Space No. 398. Also on exhibit will be the Bunn 18 in. Two Wrap Cross Tie model, designed for making either a double wrap around the bundle or one each way, without removing the package

Neby Press —The American Nebiolo Corp. will exhibit the Neby press at Display Space No. 138. The letterpress press, manufactured by Nebiolo S.p.A., Turin, Italy, has a max. sheet size of 14⅛ in. by 20½ in. The press is announced as having 13 speeds, ranging from 900 to 4800 i.p.h. Smallest sheet size is 4½ in. by 5 in. Inside chase size is 13¾ in. by 20 in. Motor, 3 h.p. Feeder and deliver capacity, 12 in. Floor space (closed) 43 in. by 83 in. Floor space (open) 64 in. by 106 in. Weight is 3850 lbs.



from the table. Sponsor states the mail tying machine is designed to tie a package of mailing matter, ranging from a few to 70 or 80 letters, without change or adjustment in 1½ sec. The machine is mounted on heavy duty casters for movement by one person to another location.

Amsterdam Continental Types and Graphic Equipment, Inc.

Display Spaces Nos. 144-147 inc., have been engaged by Amsterdam Continental Types and Graphic Equipment, Inc. Karel van der Eynden, Vice President and Manager of the company's New York headquarters, made the announcement. He also stated the following executives as well as himself would attend the Exposition; President A. G. E. van der Tuuk; President J. C. Koenders of the parent company, Typefoundry Amsterdam, are coming from Amsterdam, Holland, for the Exposition. They will be joined by M. D. C. de Bruin, Managing Director of Etablissements Plantin, Brussells.

Equipment items to be exhibited are: The Palatia, made by Albert & Cie, a 22 in. by 30 in. sheet-fed gravure press equipped with a pre-gripper-swinging-lay to assure exact register at all press speeds. Periodical examination of the run is facilitated by a tray device which draws a test sheet out at the side above the delivery stack while the press is running.

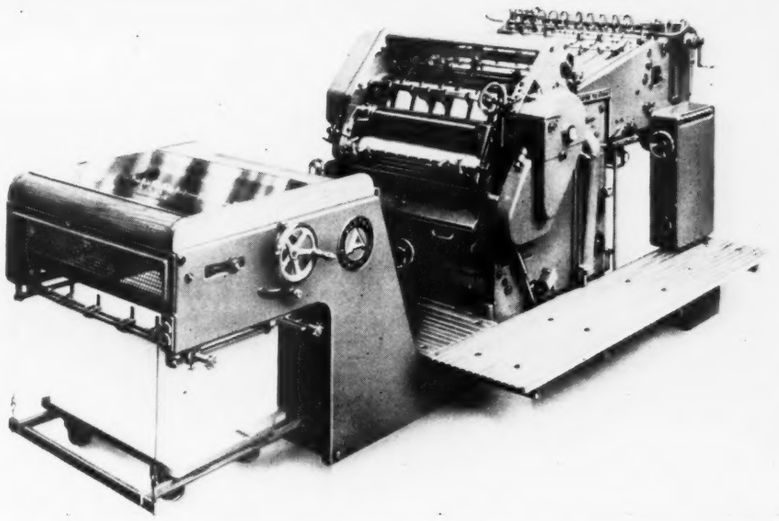
Another machine to be shown is the Ro-Fa Rotary Ruling Machine.

Brackett Stripping Machine Co. will exhibit at Display Space No. 218.

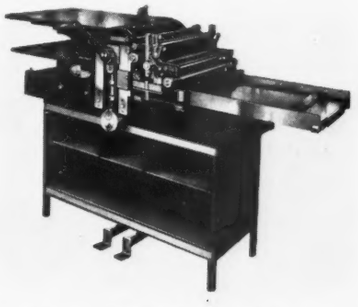
Brandtjen & Kluge, Inc., will exhibit at Display Space No. 372 and 373.

Challenge Machinery Exhibit

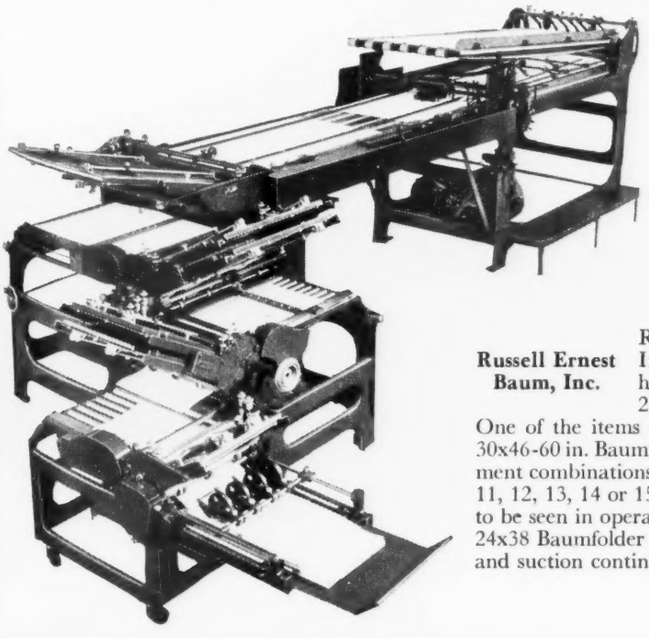
"Expect surprises when you see our exhibit" is the word from the Challenge Machinery Company, Grand Haven, Michigan, which will occupy Exhibit Spaces Nos. 190, 192 and 193. Latest developments in Challenge-Diamond Power Paper Cutters, Challenge Paper Drills, Challenge Proof Presses, and Challenge Hi-Speed Quoins will be on display. Included are the Lee Press; Labor-Saving, Mammoth, and Hi-Speed Iron Furniture; Galleys and Cabinets; Imposing Surfaces; Newspaper Bases; and special equipment built to order.



The Albert & Cie 22 in. by 30 in. Sheet-Fed Gravure Press to be exhibited by Amsterdam Continental Types and Graphic Equipment, Inc., at Display Space Nos. 144-147 incl.



Proof Press, Style KP, one of equipment items to be exhibited by Challenge Machinery Co.



Russell Ernest Baum, Inc.

Russell Ernest Baum, Inc. will occupy Exhibit Spaces Nos. 203, 205, 207, 209 and 211. One of the items to be exhibited is the 30x46-60 in. Baumfolder, in which equipment combinations can be made of 9, 10, 11, 12, 13, 14 or 15 folding sections. Also to be seen in operation will be the 22x28 24x38 Baumfolder with both suction pile and suction continuous feed. The Senior 17½ by 22½ Baumfolder with seven folding plates will be shown in operation, folding, pasting and trimming an 8½ in. by 11 in. booklet at 6000 folded, pasted and trimmed booklets per hr. A special feature will be the new Junior Baumfolders in two sizes, 14x20 and 17x22.

Towel Service

Exhibitors will be supplied with clean towels each day during the Exposition through the courtesy of Kex National Service who will exhibit at Display Space No. 334.

Callaway Mills, manufacturers of Kex Industrial Wiping Cloths, is offering this service gratis to exhibitors in appreciation of the associations with firms in the Graphic Arts and allied industries. Soiled towels will be exchanged each day for clean ones at the various booths.

Center Tool & Mfg. Co. will exhibit at Display Space No. 364.

Chicago Photoengravers Assoc. will exhibit at Display Space No. 188.

Chicago Steel & Wire Co. will exhibit at Display Space No. 430.

Chicago Typographers Assoc. will exhibit at Display Space No. 106.

Chapman Static Equipment

Samples of various Chapman transformers and static bars designed for use on presses, folders, varnishing machines, bronzers, etc., in eliminating static electricity, will be exhibited at Display Space No. 293 by Chapman Electric Neutralizer Co. A machine will also demonstrate how Chapman equipment eliminates static charges on the surface of a moving web of material running on rolls driven by an electric motor through a variable speed transmission. In attendance at the Chapman exhibit will be R. C. Payson, President; George H. Chapman, Gen-

eral Manager; D. H. Speidel, Midwest Representative; M. S. Pennell, Sales Engineer; F. E. Hanscom, Field Engineer, and Charles F. Sullivan, New York Service and Installation Supervisor.

Cline Electric Mfg. Co. will exhibit at Display Space No. 156.

Commercial Controls Corp. will exhibit at Display Space No. 104.

The Consolidated Show — Consolidated Photo Engravers and Lithographers Equipment Co., is devoting most of its exhibit to an actual production shop for offset camera work and platemaking, as well as camera work in photoengraving, in Display Space Nos. 426-429 incl., 431 and 433. Consolidated will set up and operate a modern platemaking plant. The display will include a complete temperature-controlled darkroom, Consolidated Precision Color Camera, Verticote Machine, Consolidated Vacuum Printing Frame, Temperature Controlled Developing Sinks, Plate Sinks and Processing Tables. Everything will be in operation, so the plate work from beginning to end can be shown.

A transparent darkroom will make it possible for everyone to see photographic processing in operation. The dehydrator type film and dry plate drying system will be shown for the first time. Film and dry plates are bone-dry in 4½ min. without heat or drying agents.

The Verticote 36 in. plate coating machine will be in operation. The improved System Lindmark Grainer for dry graining and regraining litho plates will be shown.

New Cottrell Two-Color Press — A completely new two-color sheet-fed rotary press will be introduced in Exhibit Space A, by C. B. Cottrell & Sons Co. This press, of entirely new design, contains many new features which will be actively demonstrated. Plates will be changed and a display sheet printed and placed in the visitors' hands.

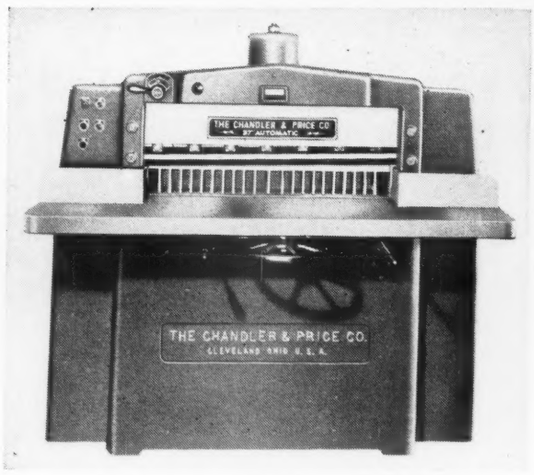
In addition to this new press the exhibit will consist of four plate treating machines which will include the latest types of Roughing & Shaving Machine, Solidifying and Shaving Machine, Power Proof Press and Precision and Gauging Machine. Operation of all this equipment will be demonstrated.

The Cottrell exhibit will be in charge of Carl C. Sweet, Vice President. L. W. Claybourn will superintend its physical operation. Company officials who will be present at the exhibit include: Donald C. Cottrell, President; A. M. Cottrell jr., Charles C. Rundlet, Albert Halstead jr., S. C. Saunders, John Springstead, Donald Cottrell jr., and Frederick Crane.

Continental Printing Equipment Co. will exhibit at Display Space No. 120.

Counter & Control Corp. will exhibit at Display Space No. 119.

C&P Cutters and Presses —Chandler & Price Printing presses and paper cutters will predominate at Exhibit Space Nos. 238-243 incl., the display sponsored by Chandler & Price Co. The equipment on exhibit will include the C&P Cylinder Press, 14½ in. by 22 in. Super Heavy Craftsmen Press, 12 in. by 18 in. Craftsmen Automatic Press, C&P 37 in. Paper Cutter, C&P 34½ in. Paper Cutter and the C&P 44 in. Automatic Paper Cutter. The 37 in. cutter is operated by push buttons and two-handed cutting controls, and is equipped with a non-repeat device.



Chemco Exhibit — Display Spaces Nos. 288-290 inc. will be occupied by Chemco Photoproducts Co., Inc. A complete display of the company's photoengraving equipment will be shown. Camera, Darkroom, Stripping and Printing operations will be carried on with particular attention to interested people who are anxious to operate the equipment themselves.

Among the most important equipment items will be the Model F Roll Film Camera and the Model 910 Controlled Temperature Darkroom Sink on working display.

The darkroom itself was designed especially for the show. It consists of a fabricated steel unit coated with baked enamel. Among its features are mobility and design which permits enlargement at a later date and adequate ventilation.

Also to be shown is the Flapjack Whirler in which the plate is flowed with enamel in face-up position and whirled dry in face-down position. The features of Chemco Model 915 Coating Sink, Standard Whirler, redesigned 24 in. by 60 in. Stripping Table, Cold Grid Printer, Negative Drying Oven, and etching room equipment, including the new Chemco Ceiling Safelight will be demonstrated.

Coxhead Composing Machines — Demonstrations of the Coxhead DSJ Type Composing Machine will be held at Exhibit Space No. 352 by the Ralph C. Coxhead Corp. Operators will produce regular reproduction proofs of type for platemaking jobs. The changeable type feature of the machine and automatic alignment of the right-hand margin, will be explained to visitors. Forty type faces are available for each DSJ machine in a size range from 6 pts. to 12 pts. The display will also include specimens of work produced by users of the DSJ Cold-Type process.

The Craftint Mfg. Co. will exhibit at Display Space No. 435.

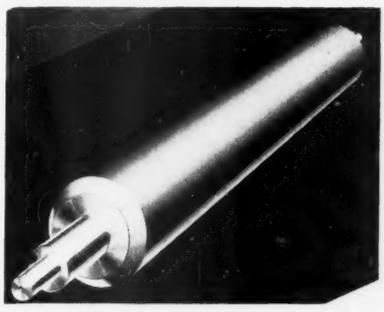
Craftsman Line-Up Table Corp. will exhibit at Display Space No. 423.

Cutler-Hammer Exhibit — Cutler-Hammer, Inc., will display in Exhibit Space No. 201 motor control and control accessories specifically designed for Graphic Arts applications. A preset type speed regulating controller with visual indication of press acceleration will be in operation. Other custom engineered controllers and control stations for Graphic Arts main drive requirements, safety switches and accessory drive controllers will also be on display.

In attendance will be P. S. Jones, F. A. Wright, M. R. Brice, L. P. Niessen, C. P. Feldhausen, F. J. Meyers, W. H. Rouse, D. S. Thorsen, E. Q. Mead, C. G. Sims, W. R. Hileman and K. H. Melzer from Milwaukee; H. H. Ratcliff, Minneapolis; C. M. Hall and A. T. Calvert, New York; C. J. Maloney, A. H. James, J. H. Sauer and L. S. Wall, all of Chicago; T. S. Towle, Pittsburgh; J. R. Adriansen, Cincinnati, and H. E. Ball, Cleveland.

Davidson Corporation will exhibit at Display Space No. 346.

Dayco Press Rollers — Dayco letterpress and offset press rollers, lithographic blankets, color separator for split color runs and fountain divider, are to be



The Dayco Letterpress and Offset Press Roller to be exhibited by The Dayton Rubber Co. at Display Space Nos. 376-378 incl.

exhibited by The Dayton Rubber Co. at Display Space Nos. 376-378 incl. Sponsor states that the Dayco Rollers handle special inks and are unaffected by inks and washes. It is designed for use as either a form, distributor or ductor roller.

Dexter Folder Co. will exhibit at Display Space Nos. 361, 363, 365, 367, 369, and 381-396 incl.

Dexter Publications will exhibit at Display Space No. 118.

Dixie Type & Supply Co. will exhibit at Display Space No. 108.

Doyle Infrared Ink Driers The principal item to be exhibited by The J. E. Doyle Co. in Exhibit Space No. 177 is a life-size operating installation containing Doyle Press Infrared Ink Driers. The coils in the heater units will be energized and the entire equipment will be operated automatically to rotate the coils away from or against the paper web just as though it were attached to a rotary printing press when the pressman pushes the printing press start and stop buttons.

Other Doyle ink drying units for smaller presses will also be exhibited.

In attendance at the exhibit will be Charles C. Doyle and two sons, James and Donald, who will be pleased to explain and demonstrate the infrared drying equipment to all visitors.

Speed-Flex Presses The Model D Speed-Flex Press will be on public display by Orville Dutro & Sons, Inc., at Booth 170. The Model D press will print the face of the web in two colors, imprint and number the same face in a third color and attach a carbon; or will print the face and back of the web, imprint and number the face in a second color and attach a carbon. Press prints from rubber plates.

Representatives of the Dutro organization will also be at the exhibit sponsored by the Pearce Development Co.

Economy Printers Products will exhibit at Display Space No. 151.

E.B.Co. Offset Press The 22 in. by 34 in. E.B.Co. Offset Press will be in operation at Exhibit Space Nos. 418-421 incl. by the Printing Machinery Div., Electric Boat Co. Several new features of the press will be shown to visitors at the exhibit, according to Harold Gegenheimer, Manager. The display will also include samples of work run by E.B.Co. presses in various commercial plants. Representatives on hand at the exhibit will include Mr. Gegenheimer; A. W. Johnston, Western District Sales Mgr.; P. Rice, Eastern District Sales Mgr.; C. Sibka, Chief Design Engineer; Owen Adams and Tom Burns, Sales Representatives, and other E.B.Co. officials.

Plating Engineers Electro-Coatings, Inc., is a Chicago firm which furnishes plating services of various kinds to the Graphic Arts industry. The firm will occupy display space No. 115 at the Exposition.

On exhibition will be a display of rotogravure cylinders consisting of a steel cylinder, a copper plated cylinder, an etched cylinder and a chromium plated cylinder. The firm plates printing cylinders with chrome which is a medium in salvage on journals to prolong wear and eliminate corrosion. Magnesium cylinders and printing plates may be chromium or copper plated. Magnesium rotogravure cylinders are plated with copper ready for etching. The firm also does chromium plating of electrotypes, stereotypes, embossing dies and engraving dies.

Electro-Copyst, Inc., will exhibit at Display Space No. 116.

Lake Shore and Reilly Exhibit Actual press runs will be used to demonstrate the Bishop Treating System for flatbed and rotary press plates at Exhibit Space Nos. 198 and 199 by the Lake Shore and Reilly Electrotype Divs. of Electrographic Corporation, according to Frank E. Reilly, Executive Vice President. Other demonstrations will show pressmen making overlays, men operating Bishop Treating Dies and the shaving of plates prior to printing. Facts and figures pertaining to Electrographic's processes will be featured at the exhibit. A slide film about the manufacture of Reilly Plastic-types and a complete line of the Corporation's products will also be shown.

Fairchild Engraver and Lithotype The Fairchild Photo-Electric Engraver and Lithotype will be exhibited by Fairchild Camera and Instrument Corp. at Display Space No. 165. The Fairchild Engraver is a machine for producing halftone engravings on a plastic material directly from original photographic copy. The machine is available in two sizes: one for producing 65 line screen halftones, and the other for 85 line screen halftones. Maximum size engraving produced by this machine is 8 in. by 10 in.

The Lithotype machine is designed for making reproducible copy for offset reproduction in a variety of standard type faces. It is equipped with a standard typewriter keyboard with additional keys for special characters, and a bank of spacing keys for use in right-hand margin justification. Type wheels are interchangeable to provide a range of type sizes from 6 to 12 pt.

The Falco Corporation will exhibit at Display Space No. 129.

Force Numbering Machines Typographic numbering machines and rotary numbering heads will be on display at the exhibit sponsored by Wm. A. Force & Co., Booth No. 439. The Force exhibit will place emphasis on numbering equipment for bank note and security engravers, ticket printers of all types, tag manufacturers, continuous form manufacturers, sales book manufacturers, as well as other kinds of printers who use numbering equipment.

Some of the numbering equipment will be in operation on special demonstrators to illustrate the high speeds at which Force rotary equipment will run. Accessory equipment, such as cams and holders, designed for use with the numbering machines will also be shown.

Representatives of the Force organization in attendance at Booth 439 will include: Wm. A. Force III, President; Harry G. Baumann, Vice President; John Nelson, Chief Engineer; William S. Adams, Engineer; and Harry H. Schultze, Mgr. Printing Eqpt. Div.

Gast Rotary Air Pumps Rotary air pumps designed for use on vacuum printing frames, vacuum backs for cameras and printing press feeders will be exhibited at Display Space No. 155 by Gast Mfg. Corp. The Gast firm will show two or

(left): Orville Dutro, President. (center): W. R. Puglisi, Vice Pres. (right): Lyle V. Dutro, Secy.-Treas., all of Orville Dutro & Son, Inc.

more pumps for each of the three applications which will range in size from the ¼ h.p. units rated 1.3 c.f.m. to the 1 h.p. units rated 24 c.f.m. Some of the units will be in operation and Gast representatives will be on hand to explain to printers and manufacturers the operation of the air pumps.

Fototype, Inc., will exhibit at Display Space No. 105.

Gane Brothers & Lane, Inc., will exhibit at Display Space No. 114.

William Gegenheimer will exhibit at Display Space No. 221.

General Binding Corp. Many years of progress in mechanical binding will be displayed by the General Binding Corp. in its exhibit in Display Space No. 306. Representatives will perform actual demonstrations of all types of GBC mechanical binding—both plastic and metal types. There will be a display of GBC bound books incorporating the use of all GBC bindings. A GBC Semi-Portable Power-Driven Punching Machine will make its bow to the trade. Included will be the improved Portable Table Model Binding Equipment including models with electric feeds, as well as floor models of plastic binding machines.

General Electric Company Four newly developed equipments, are scheduled to be featured in the General Electric Co. Display Spaces Nos. 179 and 181. A new ACA Drive for offset presses in which is employed an adjustable speed a.c. motor with a reversing starter will be shown. The drive can be mounted on the press which allows more space in the press area. A Wound Rotor Motor Controller features ganged plate-type rheostats for secondary resistance providing over 50 points of speed control; designed to operate at max. 15 h.p. A new Side Register Control operating on a rotary lens principle with greater power output will be demonstrated. A Speed Variator Drive consisting of a packaged motor generator set and a d.c. motor drive will also be shown.

General Research & Supply Co. will exhibit at Display Space No. 366.

Goss Printing Press Co. "Show me" will be the theme of The Goss Printing Press Co. exhibit in Display Space No. 312. Shown in colorful displays will be magazines, books and supplements printed on Goss presses. This includes work produced on the Goss Magazine, a one to five color heavy duty press for high speed commercial magazine printing; the Goss Speedry, a multi-color rotogravure press for newspaper and commercial colorgravure work; and the Goss Unitubular, a tubular press for medium-size dailies and commercial printers. The exhibit will also display samples of both black and white and color printing produced on the Goss Duplex Dek-A-Tube, Goss Unitube, Goss Universal, and Goss Headliner presses, as well as the Goss flatbeds—the Cox-O-Type and Duplex Model E.

Pictures of Goss installations throughout the United States will be exhibited, and a miniature model of the Goss Headliner Presses which print the Chicago *Tribune* will be shown.

Paul Florian, assistant to the sales manager, will be in charge of the Goss exhibit.

Graeber Stringing & Wiring Machine Co. will exhibit at Display Space No. 343.

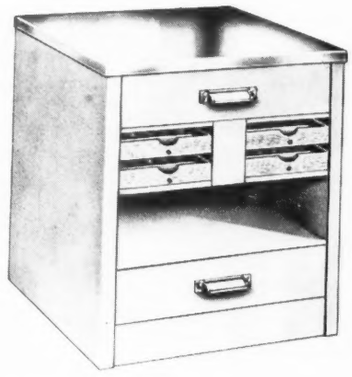
Graphic Arts Assoc. of Illinois will exhibit at Display Space No. 128.

Graphic Arts Equipment Co. will exhibit at Display Space No. 186 and 187.

Graphic Arts International Corp. will exhibit at Display Space No. 142.

Graphic Arts Production Yearbook will exhibit at Display Space No. 437.

Hambro Exhibit Hambro Machinery Div. will demonstrate the Reece Hydraulic Edge and Round Corner Turning-In Machine at Exhibit Space Nos. 167-169 incl. According to the sponsor, the machine turns in four edges and rounds four corners in one operation. Floor space is 4 ft. by 4 ft. Machine is powered by a ½ h.p., 1750 r.p.m. motor, and weighs 1200 lbs.



Hamilton Cabinets — Among several new items of equipment to be shown by Hamilton Mfg. Co. at Exhibit Space Nos. 405, 407, 409 and 410, will be the Hamilton Line-Composing Machine Operator's Cabinet No. 15750. The cabinet is designed with a flat top, permitting a neater arrangement of ad copy layout. It is equipped with two drawers for miscellaneous storage or for storage of matrices. A bin unit and a separate unit carrying four line-composing machine matrix sorts trays are located between the drawers. Overall measurements of the cabinet are 19½ in. wide, 15 in. deep and 22½ in. high.

Hamilton Tool Company The Hamilton Tool Co. announces that its Exhibit will occupy Display Spaces Nos. 141 and 143 at the Exposition. In addition to attractive decorative background, the company will exhibit the following equipment: A 17 in. by 26 in. Rubber Plate Press equipped with three main printing colors; two Numbering Machines with Fountains; one Cross Perforator; two Punching Machines; Length Slitter and Perforator with Roll Rewinding and Cutoff Delivery.

Hammermill Paper Co. will exhibit at Display Space No. 341.

Harris-Seybold Equipment An exhibit of Harris printing presses and Seybold paper cutting and bindery equipment will be sponsored by Harris-Seybold Co. at Display Space Nos. 264-267 incl. Other Harris-Seybold allied equipment and supplies for the Graphic Arts industry will also be displayed to interested visitors. Ren R. Perry, General Sales Manager, will be in general charge of the exhibit. Roy P. Tyler, Manager of Installation and Service, will be responsible for mechanical performance of the exhibit. In addition, they will be assisted by the managers of the five Harris-Seybold districts in the United States and the vice president of Harris-Seybold (Canada) Ltd.

View of Rota-Matic Fully Automatic Rotary Card Cutter.—Machine is made by Gibson Machine Mfg. Co. and will be shown in Display Space No. 315 at the Exposition. Max. size sheet, 24 in. by 15 in. (cutting into 15 in. long strips); min. cut card size, 2 in. by 1 5/16 in., standard machine; 2 in. by 1 1/8 in. or less, on special order. Max. thickness recommended, 0.030 in.; motor, ¼ h.p., single or 3 ph. motor and switch; floor space required, 39 in. by 8 ft. 9 in.; standard equipment: 7 pairs of cutters and provision for delivering 6 cards to the stacker table. Designed for handling thermographed business cards, embossed or panel cards, small cards, etc.

WEB OFFSET INKS?

Just call POPE & GRAY, *Inc.*

The enclosed sheet is an example of printing produced on an ATF-Webendorfer Four-Unit Web Offset Perfecting Press. The run was printed at a speed of approximately 400 feet per minute, with Pope & Gray's Heat Dry Inks, dried with an electric drier, and finish-folded tabloid-size product delivered at press speed. These inks are soft enough for news stock and sharp enough for the finest process work. Insert trimmed slightly to fit in this magazine.

Photographs used: S. D. Warren Co., pages 1, 4, 8; Reader's Digest, page 2; General Electric and Embree Manufacturing Co., page 5; Fortune Magazine, page 6; Gilberton Co., page 7; Conde Nast, pages 3, 5; Vogue Pattern 477, Copyright 1949; Vogue Pattern 6540, Copyright 1948; Vogue Pattern S4938, Copyright 1949.
Paper used: Bulkley-Dunton's Northland Vellum

Also for your sheet-fed offset presses investigate

POPE & GRAY'S *Quickset Offset Inks*

A new ink and a real step forward. Sharpness—Perfect trapping— Finish with no gray-back
Minimum transfer to succeeding blankets on multicolor presses
Rapid drying with good press stability.

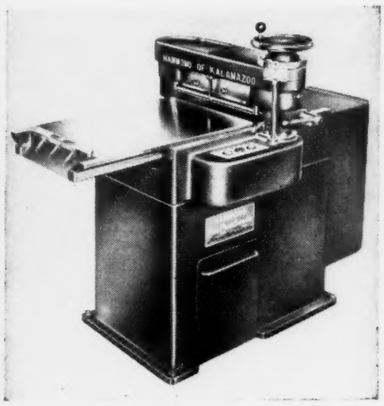
POPE & GRAY, INC.

Fine Printing and Lithographic Inks

95 Morton Street, New York 14, N. Y.

Hammond Equipment

Representatives of Hammond Machinery Builders, Inc., will demonstrate Hammond composing room saws and stereotype equipment at Exhibit Space No. 310 and 311. Hammond's Glider TrimOsaw, Mercury TrimOsaw and Ben Franklin TrimOsaw will be included.



Hammond Full-Page Shaver to be demonstrated at Display Space No. 310 and 311.

Equipment designed to fit the flat stereotyping requirements of the large weekly and the small and medium size daily newspapers will be displayed. The stereotype machinery on exhibit will include Hammond's Full-Page Scorcher, Full-Page EasyKaster, Stereotype Glider TrimOsaw, Radial Router and Full-Page Shaver.

Heinrich Press

H. H. Heinrich, Inc., will exhibit a new Anilox Multicolor Printing Press for printing labels or form printing at high speed from rubber plates in Display Spaces Nos. 230 and 232. Delivery on the press can be made in either rolls or sheets. Heinrich engineers will be present at the exhibit.

Static Control Equipment

Operating models of the Takk Static Control System showing its application on all types of printing presses, folders, rulers and paper sheeters, will be found at Exhibit Space No. 299 sponsored by The John Hewson Co. Also shown will be the Staticator which will indicate the locations where static is being formed, intensity of the charge and nature of the charge. Forum discussions will be held concerning static problems and its control. Trained sales technicians will be in attendance at the exhibit.

Frank M. Hill Machine Co. will exhibit at Display Space No. 360.

Huebner Laboratories will exhibit at Display Space No. 222.

Hyre Electric Co. will exhibit at Display Space No. 134.

Ideal Roller Co. will exhibit at Display Space No. 359.

Imperial Type Metal

Imperial Type Metal, Type Metal Fluxes, Mold Polish and Photoengraving Zinc will be on display at the exhibit sponsored by Imperial Type Metal Co., Display Space No. 287. To be exhibited will be production specimens from Imperial type metal and engraving zinc. Visitors will also be afforded an opportunity to view specimens of letterpress printing from Imperial type metal and engraving zinc. The exhibit will be in charge of Clarence Seaman, Vice President.

The Inland Printer will exhibit at Display Space No. 406.

Printing House Craftsmen

The International Association of Printing House Craftsmen, Inc., will hold forth in Display Space No. 308. Intl. Exhibit Committee Chairman George Skach tells us that Booth No. 308 will be a gathering or meeting place for all Craftsmen Club members. All local and out-of-town Craftsmen can pause and rest their tired feet. It is planned to erect a Message Board for visiting Craftsmen through which they may contact members while at the Exposition.

The exhibit will be confined to club activities, including Printing Week. The International Association's L-shaped space will have the atmosphere of a comfortable office. The display space will be open for the entire period of the Exposition as well as during the 31st annual convention which will be held at Hotel Stevens, Sept. 10 to 13 inclusive.

Intertype Fotosetter

The Intertype Fotosetter machine will be on public display by Intertype Corporation for the first time at Exhibit Space No. 261. This machine is the photographic equivalent of the hot-metal line-composing machine. The product of the machine may be used in letterpress and offset platemaking and in gravure plate and/or cylinder making.

Type face sizes range from 4 pt. to 36 pt. inclusive. Lines of any length may be composed up to and including 42 picas.

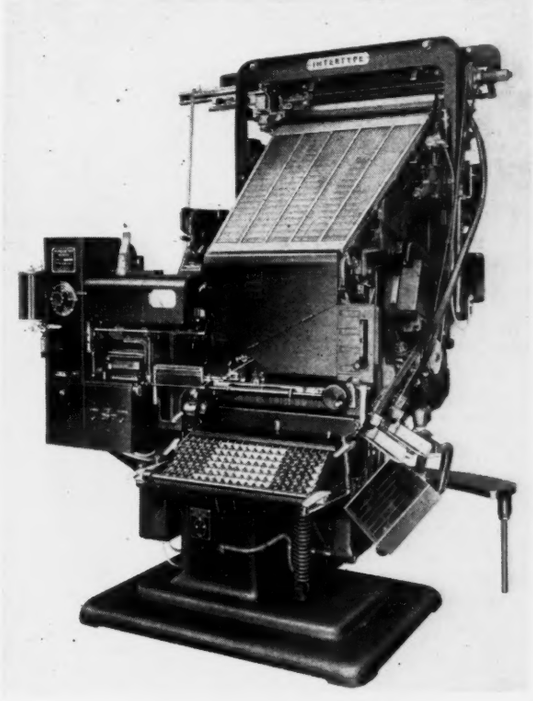
The film container holds 20 ft. of film in a continuous roll. Any amount of exposed film can be removed at any time in daylight. Film positives, film negatives, and paper positives are obtainable directly from the machine. The film positives and negatives provide emulsion-to-emulsion contact for making lithographic, gravure and photoengraved plates.

Mechanical corrections are provided by a corrector using locating pins and register holes punched automatically in the film. Page makeup is faciliated by an illuminated vacuum table adapted to register holes in the film.

Intl. Typographic Composition Assoc. will exhibit at Display Space No. 107.

Intl. Dry Spray Corp.

Plans for the International Dry Spray Corp.'s exhibit in Display Space No. 153 include the demonstration and actual operation of a two-nozzle IDS Dry Spray Unit on a Miehle Press. Use of the Spray on actual printed sheets will be shown. A colorful background display will carry large blowup photographs of IDS installations. A special two-color brochure has been prepared especially for the show. Many printed jobs, all difficult to produce without offset will be displayed. President Sidney Bennett of Intl. Dry Spray Corp. will be in charge. Assisting him will be Alan Friedman, Thos. T. Todaro, B. Fred, Dan Stone, Sidney



The Intertype Fotosetter, which will be exhibited for the first time by Intertype Corporation at the National Graphic Arts Exposition. The machine is the photographic equivalent of the hot-metal line-composing machine.

Cont. on Next Page

Stone, Walter Thomas, George Keller and Ernie Steckler.

J. Curry Mendes Corp. will exhibit at Display Spaces Nos. 285 and 286.

Myron Jonas Company

Because it is an advertising agency specializing in Graphic Arts accounts, the theme of the Myron-Jonas Co. exhibit in Display Space No. 298 will be "Advertising, then and now." The large central display, Mr. Jonas stated, will picture work done for clients, such as brochures, folders, catalogs, stationery, direct mail, advertising campaigns and publicity. On either side of the background display will be a unique collection of advertising cards produced by New York lithographers in the 1870s and the 1880s. A colorful folder will be distributed to prospective clients. It will be produced by letterpress, offset, gravure and photogelatine. Myron Jonas and Mrs. Margaret Jonas will be in charge of the exhibit.

Jones & Lamson Optical Comparator

In Display Space No. 140, Jones & Lamson Machine Co. will exhibit and demonstrate its new J&L Model BC-7C Bench Type Optical Comparator. The instrument is used for obtaining accurate Monotype type character alignment on the type body by optical measurement. Alignment is claimed to be within 0.0002 in. accuracy.

C. Walker Jones Co. will exhibit at Display Space No. 117.

William M. Kemp Co. will exhibit at Display Space No. 434.

Kidder Press Co., Inc.

A photographic display of Kidder products with emphasis placed on recent Kidder developments, comprises the exhibit sponsored by Kidder Press Co., Inc., at Display Space No. 330. Brochures will be available and representatives of the sales and engineering staff will be present at the display.

Kimble Electric will exhibit with ATF at Display Space Nos. 130-133 incl., 244-260 incl. and 268-272 incl.

Kleen-Stik Display

Display Space No. 109 will be occupied by Kleen-Stik Products, Inc. Samples of labels and point-of-purchase advertising produced on pressure-sensitive Kleen-Stik stock will be on display. This stock is suited for die-cut display pieces, labels, self strips, oil change tickets, etc. The exhibit will be manned by Gerald E. Cole, President; Jerry Zalkind, Vice President, and Wayne Lasinski, Asst. Sales Mgr. Most of the sales personnel will also be in attendance. Kleen-Stik Products will hold open house at the down-town offices, 225 N. Michigan Ave., Chicago, and will demonstrate methods and applications at 2611 S. Indiana Ave., Chicago.

Korn's Litho Crayons and Inks

Harry F. Korn, President of Wm. Korn, Inc., has announced that the company will exhibit its line of Lithographic Crayons and Inks at Display Space No. 332. The exhibiting firm will also demonstrate the use of Korn's Liquid Tusche and Crayons in screen process printing. The display will be attended by Miss Marie Pappalardo.

Lake Erie Engineering Corp.

Lake Erie Engineering Corp.'s exhibit will be shown in Display Spaces Nos. 152 and 154. The background display will include outstanding examples of rubber plates, plastic plates and stereotypes, as well as samples of printed work from each of these classes of plates. The actual equipment to be exhibited will consist of two Acraplate Molding and Vulcanizing Presses, together with auxiliary equipment.

One of the machines will be the newest of the Lake Erie Presses. It is a self-contained 115 T. molding and vulcanizing unit with 17 in. by 22 in. platens, automatic electric heating and motor-driven pumping system.

The Lake Erie Model 55 Acraplate 550 T. Molding and Vulcanizing Press for heavy-duty plastic plate and rubber plate production, or stereotype matrix molding will also be shown.

Lawter Chemicals, Inc., will exhibit at Display Space No. 335 and 337.

Linotype Parts Exhibit

In Display Space No. 425, Linotype Parts Co., Inc. will present the new Model E Star Automatic Quadding Attachment for application to line-composing machines. The basic principle of operation of the Star Quadder is retained in the Model E. The added feature is a single operation measure-changing device which permits setting the assembler slide, vise jaws, and the quadder in one motion, and permitting automatic synchronization with the Mohr Lino-Saw. This feature will be included with every Star Quadder, whether or not it is to be installed on a machine with Mohr Saw. The Model E Quadder will be demonstrated in actual operation on a line-casting machine at the Exposition.

Lawson Paper Cutters

Working demonstrations of Lawson's 39 in. Heavy Duty Automatic Clamp Cutter, 46 in. and 52 in. Heavy Duty Hydraulic Clamp Cutters and Electronic Spacer Cutter will be featured at the exhibit sponsored by E. P. Lawson Co., Inc., at Display Space Nos. 351, 353 and 355. Also to be exhibited is the Lawson Heavy Duty Drill Slotting Machine. Fluffy, cockle finish paper, tough index, ledgers, etc., will be used in the cutting demonstrations.

The back gauge on the Electronic Spacer is hydraulically operated and controlled by an electronic eye. Lawson will be represented at the exhibit by D. W. Schulkind, President of the company, and sales personnel from both the Chicago and New York offices.

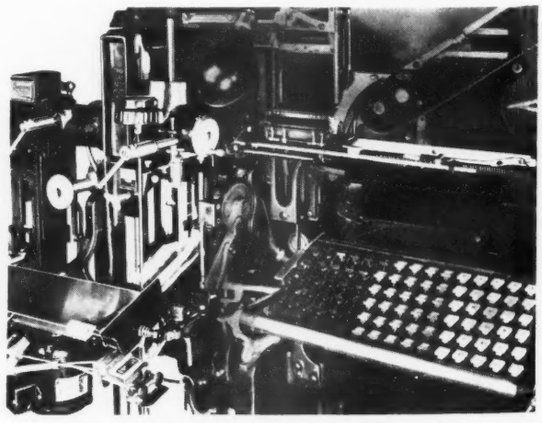
Lester and Wasley Bindery Equipment

Deckling machines and perforators will be demonstrated to visitors at Exhibit Space No. 237 by The Lester and Wasley Co., Inc. A Leader Dash Line Perforator, Leader Bench Model Deckling Machine and Leader Photo Mount Deckler will compose the equipment to be exhibited.

Fred'k H. Levey Co., Inc., will exhibit at Display Space No. 362.

A. F. Lewis & Co. of New York & Graphic Arts Pub. Co.

In Exhibit Space Nos. 101-103 incl., The Printing Trades Blue Books will furnish gratis the following facilities for the sole use of exhibitors and their personnel: (1) Maintain a directory service recording the names of all exhibitors and personnel, as well as a list of the hotels at which they will be registered, or the places where they may be located (2) Receive and distribute all incoming mail for exhibitors and their personnel. (3) Provide page boys to locate any person within the Amphitheatre. (4) Furnish confidential secretarial services including special stationery. Provision will be made for the return of stenographic notes along with your letters and the carbon copies. (5) Provide all other ancillary office services necessary for your convenience



Picture shows new Model E Star Automatic Quadding Attachment and Mohr Saw on Linotype machine. The new Model E will be demonstrated at the Exposition.

at the show. The announcement was made by President M. F. Lewis of A. F. Lewis & Co. of New York, and by President D. B. Eisenberg of Graphic Arts Pub. Co.

Linotape Products Co. will exhibit at Display Space No. 220.

Lithographic Technical Foundation

In keeping with its position in the industry, the Lithographic Technical Foundation will exhibit at Display Space No. 173. The Foundation will display its services to improve the lithographic process and materials, and its training and educational activities to improve the skill of craftsmen. Featured will be a kit which includes photograph record, playback, amplifier and strip projector showing examples of the technical audiovisuals being made available to lithographic plants. The Foundation's new library bookshelf and complete library will also be shown, as well as examples of visual aids for in-plant and school training.

Lockwood's, Inc., will exhibit at Display Space No. 343.

Ludlow Equipment

A practical working exhibit of Ludlow and Elrod equipment will be held at Display Space No. 283 by Ludlow Typograph Co. The demonstration will include a variety of job, display and ruleform composition performed on a Ludlow machine. The Elrod will be in operation producing strip material, spacing material, rule border and base in a size range from 1 pt. to 36 pts. thickness. The use of Elrod material for blocking out, makeup and lockup, and for base will also be shown. Private demonstrations may be arranged for those interested in special features of the equipment. Visitors to the Exposition will also be welcome at Ludlow's general offices and factory at 2032 Clybourn Ave., on Chicago's lower northwest side.

Macbeth Arc Lamps

Several models of Macbeth Photographic Arc Lamps will be exhibited at Display Space No. 436, sponsored by Macbeth Arc Lamp Co. Included will be the Type 8FA Camera Lamps designed with vertical reflecting facets for building up the light around the outer edges of the copy and cutting down the light concentration in the center. For large frames, the B16 Production Printing Lamp will be shown. Two models of the electronic motor-controlled lamps on exhibit will include the Constantarc, with the vertical 12 in. carbon trim, and the Photoarc, having horizontal carbon trim. Also on exhibit will be the Macbeth Color-Transparency Chromocritic for registering and reproducing specific color temperature. Iredell Eachus, Iredell Eachus, jr., Jesse D. Haas and John Lilly will represent the company at the display.

S. A. Marinoni will exhibit at Display Space No. 183 and 185.

Mark' Andy, Inc., will exhibit at Display Space No. 402.

Mark Specialty Co. will exhibit at Display Space No. 399.

Mercury Mfg. Co. will exhibit at Display Space No. 137 and 139.

Mergenthaler Linotype Co. will exhibit at Display Space No. 282.

Miller-Lauffer Printing Equipment Corp.

Hobson Miller, President of Miller-Lauffer Printing Equipment Corp., announces his company's exhibit in Display Space No. 303.

A blow-up photograph of a Kelly press will serve as the background for a demonstration of the Tally-Tab. An actual Tally-Tab will stand in front of the picture of the delivery platform of the press. Synchronized with the movement of a journal box on the press, it will count off and insert tabs into the delivery pile exactly as it does in the pressroom. The number counted will register in a large, specially built counter which will be attached directly above the Tally-Tab. Colorful new 2-color descriptive folders have been prepared for distribution. Hobson Miller will be at the exhibit throughout the show.

Miehle Printing Presses

Five presses will be displayed by the Miehle Printing Press and Mfg. Co. in Display Spaces Nos. 273-277 inc. The company is celebrating its 60th anniversary during the Exposition. The exhibit will be conducted under the direction of Carleton Mellick, Miehle Vice President in Charge of Sales.

Besides the Vertical and Offset Presses, Miehle will exhibit a No. 29 Letterpress, a No. 41 Single-Color Letterpress and a No. 61 Single-Color Sheet-Fed Rotary Letterpress.

The Sheet-Fed Rotary Letterpress, the newest letterpress is similar in construction and operation to the new line of Miehle Offsets. It is built on the unit principle in single and multi-color models. Each printing unit has its own individual impression cylinder, so that makeready is comparable to that on flatbed presses.

The No. 56 Two-Color Letterpress, the newest addition to Miehle's line of flatbed presses, will not be exhibited at the Exposition, but will be displayed on the erecting floor at the Miehle plant. Besides the No. 56, most of the rest of the Miehle Line, including Cutters and Creasers and the No. 41 Two-Color Letterpress, which cannot be exhibited at the show because of limited space, will be shown at the Miehle plant.

A daily series of conducted tours of the Miehle plant, will be held throughout the period of the Exposition.

Modern Lithography will exhibit at Display Space No. 300.

Mohr Saw Exhibit

The Mohr Saw for attachment to either the Intertype or Linotype line-composing machines and the Mohr Portable Bench Saw are to be exhibited at Display Space No. 113 by Mohr Lino-Saw Co. The Mohr Saw automatically saws each slug as it is ejected by the line-casting machine. The Portable Bench Saw is designed for sawing slugs in small takes or make-up material. The exhibit will be in charge of H. O. Mohr and W. F. Christman, Sales Engineer.

The Monitor Controller Co. will exhibit at Display Space No. 317.

Monomelt Exhibit

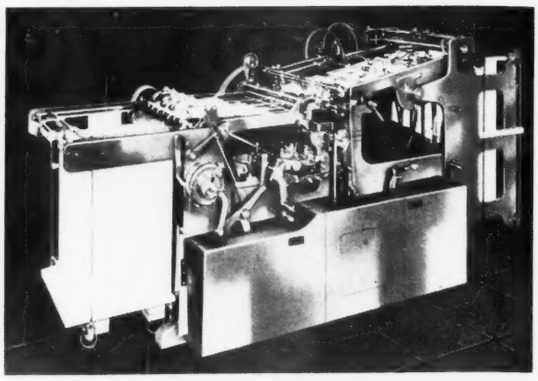
The Monomelt Co.'s exhibit will be presented in Display Space No. 180. Stressed will be a panorama of the many phases of the company's business including research and technical improvements of new products developed by the company. The Monomelt Feeder will have an important place in the display. Among the new machines will be the new Model D Plane-O-Plate Rotary Shaver and the new Ponomelt Power Shear. The Power Shear will shear stereotypes, electrotypes, zinc, copper

Monotype Exhibit — In exhibit spaces 411 through 417 will be displayed the latest in Monotype equipment at the Graphic Arts Exposition. Both letterpress machines and photomechanical equipment will be shown, the former connected to electric power lines so that they may be operated. The exhibit will be in charge of Carl C. Sorensen of the home office in Philadelphia. He will be assisted by specialists from the field who are entirely familiar with the machines displayed.

and plastic plates and news mats. A step by step portrayal of the molding of Vinylite thermoplastic material by the Monomelt press will be part of the display. Combined with it will be the sequence presentation of the Hydro-Caster controlled pressure method of backing up electrotype shells. Also included will be samples of the Peacock Silver Spray Process and other supplies.

Miller Printing Presses

Five different automatic cylinder presses in both single and two-color models will be exhibited by Miller Printing Machinery Co. at Display Space Nos. 278-281 incl. Included will be the 19 in. by 25 in. SG Automatic Press, 21 in. by 28 in. TW Two-Color Press, 21 in. by 28 in. SW Single-Color Press, 27 in. by 41 in. SY Single-Color Press and the 27 in. by 41 in. TY Two-Color Press. Latest of these models is the SG Automatic Press which features a rotary ink mill distribution system and a counter balanced feedboard lift. Specifications for this press are: max. sheet size, 19 in. by 25 in.; min. sheet size, 7 in. by 10 in.; max. size form on bed, 18½ in. by 25 in.; max. size form in chase, 18½ in. by 24 in.; range of operating speeds, 2750 to 5000 sheets per hr.; net weight, 8050 lbs.



The Miller 19 in. by 25 in. SG Automatic Press to be exhibited at Display Space Nos. 278-281 incl. by Miller Printing Machinery Co.

Kenneth J. Moore & Co. will exhibit at Display Space No. 375.

The Morrison Co.

In Display Space No. 215, President George F. Morrison states The Morrison Co. will exhibit various metal working tools as follows: Morrison Models 3-A, 45 and Special 45 Saw-Trimmers, Morrison Slub Stripper, Morrison Router and Typehi Planer and Morrison Plate Beveler. Auxiliary equipment will also be shown. All machines will be explained and demonstrated.

Murray Engraving Co. will exhibit at Display Space No. 125.

National Assoc. of Printing Ink Makers, Inc., will exhibit at Display Space Nos. 422 and 424.

National Bundle Tyer Co. will exhibit at Display Space No. 224.

NGAE Association

The National Graphic Arts Education Assoc. will exhibit in Booth No. 196. In general, the exhibit will show the quality of Graphic Arts instruction in the different types of schools of printing in the United States and Canada. Included will be exhibits from typical courses of printing from Junior and Senior High Schools, Trade and Vocational Schools, and Colleges and Institutes. Also, there is an exhibit showing activities and publications of the NGAEA. Ray A. Worst of Hancock Vocational Preparatory School, Chicago is Chairman of the Exhibits Committee. John G. Henderson is President of NGAEA. In addition to other instructors, Educational Director Fred J. Hartman of Washington, D. C., will be in attendance.

National Safety Council

The National Safety Council has granted its Printing and Publishing Section a generous allotment of Display Space No. 197. The Printing and Publishing Section's comment is as follows: "This is further evidence that the prevention of injury to employees, and the prevention of destruction of equipment and property from accidents and fire, is a common ground for everybody in the Graphic Arts industries."

New Era Mfg. Co.

Display Space No. 343 of New Era Mfg. Co.'s exhibit will have a background, the center panel of which showing photographic enlargements of New Era Presses adapted to tag, label, ticket, unit sets and other commercial form printing. Sections of the background at either side will show an enlargement of the Lockwood Superior multi-color press and four photographs of Graber Tag Stringer and Looper, Tag Stringer and Knotter, Patch and Eyelet Machine and Wiring Machine. Actual equipment on display will consist of a New Era Press upper print unit with unwind and tension unit; a Graber Stringer and Knotter, and a Lockwood Press. Samples of work will be shown.

In attendance will be President Horace C. Lockwood, Vice President Joseph E. Morris, Secy.-Treas. C. Richard Fairlamb, Albert Poma and Charles Brown.

Nolan Corporation

Display Spaces No. 121-124 inclusive will be occupied by Nolan Corporation. The exhibit will be in charge of W. A. Nolan. Nolan's complete line of equipment will be shown, including the following: Stereotype casters, saws, matrix drying machine and matrix humidor; saw-trimmers, routers, router and type high planer, proof presses, mitering machine, strip material cabinet, imposing surface, makeup trucks, remelting furnaces, water-cooled ingot mold, scrap truck, pig dolly, utility and bindery trucks, variable speed press control, fans and blowers, router bit sharpener and type high gauge.

In attendance will be Pres. Edward J. Nolan, Vice Pres. Lyndon E. Rebe, Asst. Treas. Wilbert A. Nolan, Factory Repr. A. F. Nolan, Advertising Mgr. Robert D. Berry, Factory Mgr. C. Robert Edwards, Factory Representatives Robt. C. Sapp and Chas. T. Skyes, Supt. Phillip Quatro, Foreman Samuel Quatro and Engineer Phillip S. Taverna.

Northwest Paper Co. will exhibit at Display Space No. 331.

nuArc Automatic Arc Lamp

Display Space No. 112 will be occupied by nuArc Company representatives, H. R. Benson and J. H. Schultheis, who will demonstrate the new N-110 motor-driven, automatic Arc Lamp for use in platemaking processes. The nuArc Lamp can be used for vacuum frame and copyboards, or on camera brackets, with power control box mounted on wall, floor or wherever convenient, and on photocomposing machines. This new type arc lamp is claimed to produce a controlled light of 7000 deg. Kelvin temp. with uniform intensity within a tolerance of 5% plus or minus.

Nygren-Dahly Co. will exhibit at Display Space No. 342.

Ohio Knife Co. will exhibit at Display Space No. 401.

Oxford Paper Co. will exhibit at Display Space No. 148.

Oxy-Dry Sprayer Corp.

Actual long press runs will be used to demonstrate the new anti-offset sprayer and anti-offset powder of the Oxy-Dry Sprayer Corp., according to Sales Manager Paul S. Rosewall. "We have two interesting developments in offset prevention to show this year," said Rosewall. "They are the new positive powder control micrometer device, and our new anti-offset powder." Plans have also been made to demonstrate the recently developed Bista Overlay Method of Pre-makeready in exhibit spaces Nos. 233 and 235. Literature on the new Bista method will be available at the Exposition.

Paasche Airbrush Co. will exhibit at Display Space No. 126.

Parsons & Whittemore, Inc., will exhibit at Display Space Nos. 182 and 184.

Pearce Development Co. will exhibit at Display Space Nos. 170 and 172.

British Camera Equipment

Pictorial Machinery Ltd. of London, Eng., will exhibit the Lithotex Junior Auto-Focus Step-and-Repeat Camera, the Regal Precision Darkroom Color Camera and Regal Printing-Down Frame, at Display Space Nos. 202, 204 and 206. The step-and-repeat camera will accommodate plates or films up to and including 20 in. by 20 in. Camera is equipped with an automatic focusing device ranging from $\frac{2}{3}$ reduction to 2 enlargements. Vacuum film holder for the color camera will take any single film size up to 30 in. by 24 in. The printing-down frame is available in three sizes. Max. exposure area ranges from 43 in. by 36 in. to 63 in. by 45 in.

Plastic Binding Corp. will exhibit at Display Space No. 356.

Potdevin Machine Co. will exhibit at Display Space No. 217.

Printing Equipment Engineer

From Space No. 291, *Printing Equipment Engineer* will distribute copies of its latest issue. The display space is at the right of the main entrance. Facilities and services offered by *Printing Equipment Engineer* will be explained. A special motion backdrop has been provided. Those in attendance will be William Osborn, Edward H. Owen, Gene Powers, MacD. Sinclair, C. A. Tallinger and Don Will.

Printing Industry of America, Inc.

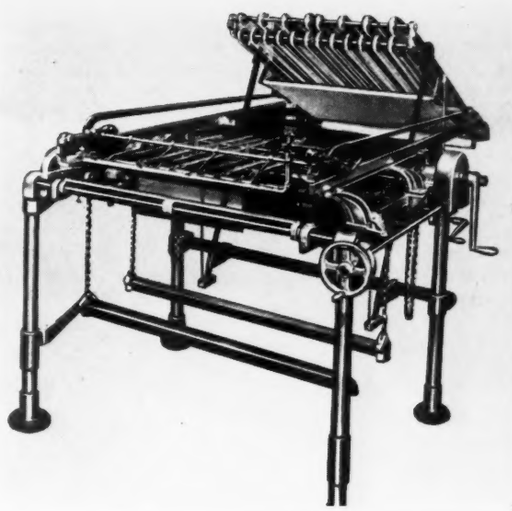
Printing Industry of America will share a large Exhibit Space (No. 127) with the Graphic Arts Assoc. of Illinois, the local affiliate of PIA which will be host to the PIA convention at the Palmer House. The PIA-GAAI space will be comfortably furnished with lounge chairs, according to Glenn C. Compton, "for the relief of those who acquire exhibition feet during their Exposition peregrinations." It will provide a quiet spot for those who wish to talk shop with their fellow printers.

Magnesium Base To Be Shown

In Display Spaces Nos. 379 and 380 will be featured a new product of The Printing Machinery Co. Included will be shown display of the company's products.

Lee Augustine, Vice President, Printing Machinery Co., said company's new magnesium Sterling Toggle Base will be featured. It weighs about one-fourth as much as semi-steel or zinc die cast base. The magnesium Sterling Toggle Base uses the same hooks and accessories made for the semi-steel base.

The company also will show the various types of its flatbed and rotary plate mounting and registering bases. Also, the PMC Die Cutting Machine will be in operation. The PMC Flinker Fountain Divider, another of the company's products, will be shown.



Extension Delivery—The Model D Extension Delivery for cylinder presses to be on display by The Rathbun & Bird Co., Inc., at Exhibit Space No. 214. The attachment delivers sheets face-up. Illustration shows the delivery with tape carriage raised. Representatives of the Rathbun & Bird organization in attendance at the exhibit will include Carl J. Bergstrom, President; J. S. Breslove, Sales Manager, as well as mechanical staff.

Process Color Plate Co., Inc., will exhibit at Display Space No. 309.

Rapid Roller Co. will exhibit at Display Space No. 354.

Regency Thermographers will exhibit at Display Space No. 404.

Flat Bronzing Machines

A Soldans 52 in. Flat Bronzing Machine will be in operation at Booth Nos. 164 and 166, by Printrade Machinery Corp. The Soldans machines, for gold or silver bronzing in one operation, are available in 28 in., 44 in. and 52 in. wide models.

Machine features staggered interlocking bands which dust the sheets from the center out. A conveyor conveys the sheets to the machine from the pile delivery of offset or letterpress presses.

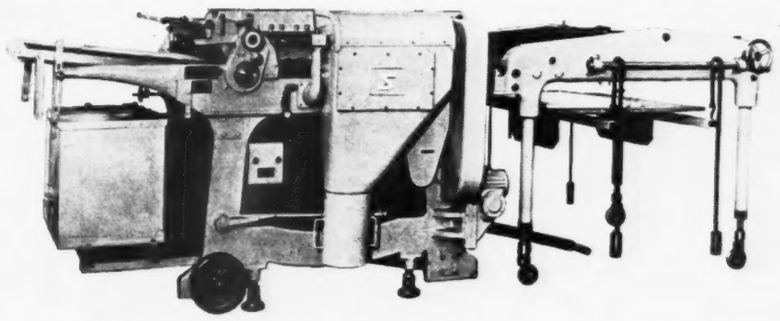
Soldans bronzing machines are synchronized with the speed of the press. An exhaust system works on the baffleplate principle. Removal of the pile can be made while machine is in operation. Machines may be moved from one press to another.

J. A. Richards Co. Exhibit

Richards composing room and stereotype equipment will be on display at Exhibit Space No. 371, sponsored by the J. A. Richards Co. The following items will be included in the display: Mest composing room and plate mortising saw trimmer, router, planer and jig mortising unit; Clipper rolling table saw trimmer with built-in material storage; Do-More Universal saw trimmer, router, planer machine; diemaking equipment; Electromatic Super Diemaker combination machine; stereotype saw trimmer with 27 in. by 36 in. table; Model EMM jig and drill mortising unit. Representatives at the exhibit will include J. A. Richards, sr., Paul A. Richards, Robert E. Richards and J. A. Richards, jr.

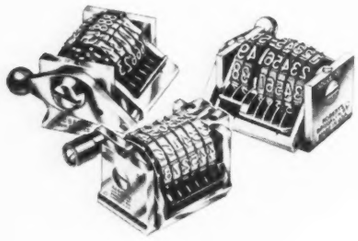
Riehl Galley Locks and Tie-Ups

The Riehl Galley Lock Co. will demonstrate in Display Space No. 110 its full line of Page or Form Tie-Ups and the Side and End Galley Locks. All the necessary equipment to give a practical demonstration of the uses of these items will be provided. The permanent Tie-Ups are adjusted by hand to the size of the type matter to be enclosed by nesting them in grooved reglets surrounding the type matter.



Soldans 52 in. Flat Bronzing Machine to be shown in operation at Printrade Machinery Corp.'s exhibit.

Roberts Numbering Machines In Roberts Numbering Machine Co.'s Display Space No. 158 will be featured a new all-steel Roberts Typograph Ma-



chine using a gear drive and interchangeable wheels with hand-trimmed characters.

Also featured will be the new Roberts high-speed rotary typographic numbering machines.

In charge of the Roberts exhibit will be President George A. Seaver, assisted by Sales Mgr. Red Hickey and Chief Engineer Henry Krupp.

Roberts & Porter, Inc., will exhibit at Display Space No. 328.

Robertson Equipment R. R. Robertson Co. will exhibit a redesigned overhead precision camera, temperature controlled sink, automatic diaphragm control and light integrator, at Display Space No. 228. Feature of the overhead camera is the accessibility to all working areas and all metal construction. The sink, constructed of corrosion resisting steel, controls temperatures to within 1 deg. of the desired temperature, according to the sponsor. The Robertson light integrator consists of the light measuring portion of the automatic diaphragm control. The device measures individually light units of 50 ft. candles. In attendance at the Robertson exhibit will be W. E. Miller, A. A. Finkl, J. F. VanCata and E. Pollack.

Rosback Perforators Rosback perforating, punching and stitching equipment for the bindery will be exhibited by F. P. Rosback Co. at Display Space Nos. 225, 227 and 229. Featured at the exhibit will be the Pony Vari-Speed Rotary Perforator designed to do strike or skip perforating on sheets up to 30 in. long. Continuous perforating can be done on sheets of any length that can be fed through the machine. Speeds range from 24 to 48 head r.p.m. Maker states from 24 to 48 lifts per min. can be fed on strike work and continuous perforating lifts of stock can be fed as fast as the preceding lift is out of the way. From 2 to 10 sheets can be fed at each lift, depending upon the thickness and character of the stock.

Rouse Equipment The Rouse Printing Plate Saw will be featured at Exhibit Space No. 219, sponsored by H. B. Rouse & Co. Designed for photoengravers, stereotypers and for printers in the composing room, the saw will cut mounted or unmounted zinc and copper photoengravings, shell cast stereotypes and plastic plates. Among other Rouse equipment items to be displayed at the Rouse exhibit will be the Rouse Band Saw, Vertical Miterer, Hand Miterer, Lead and Rule Cutter, Type Mortiser, Lino Slug Cutter, Form Truck and Tympan Paper Holder. Also Composing Stick, Line Gauge, Makeup Rule, Register Quoins, Slug Clippers and Newspaper Wall File.

E. G. Ryan & Co. Exhibit The Toland Colloid Plate for lithographic processes, and the Ryco Black Photographic Light for exposing zinc and colloid plates, will be demonstrated in E. G. Ryan and Co.'s Exhibit No. 339. Also to be exhibited will be the Ryco Ink Roller Washup Attachment, Ortleb Ink Agitator, Ortleb Dry-No-Offset Spray, and the Tally-Tab which automatically places a marker in the delivery pile of the press at predetermined intervals. Other new Ryan products will also be on display in the company's office-showroom floor.

St. Regis Sales Corp. will exhibit at Display Space Nos. 210 and 212.

Schaefer Coating Machines Several types of newly designed coating machines for gluing, cementing and gumming operations on paper, cardboard, book cloth, leather and leatherette, will be displayed by Schaefer Machine Co. at Exhibit Space No. 370. The machines are available in roller widths of 3 in. to 52 in. Company representatives in attendance at the exhibit will include William P. Schaefer jr., Andrew Zoltac, Harold A. Belward and Charles F. Schaefer.

Screen Process Printing Assoc. will exhibit at Display Space Nos. 314 and 316.

"I. S." Jogging Machine Ilya Scheinker, Mechanical Engineering, will occupy exhibit space No. 157. The "I. S." Jogging Machines are intended to take care of the most severe problems in jogging requirements. The machines are made in various sizes and are used on the press delivery and on rotary perforators. The "I. S." electromechanical Jogger, states Ilya Scheinker, handles all kinds and weights of paper from tissue to board. The jogging units are floor mounted. Removable partitions allow use of entire jogging platform. The jogging platform may be tilted to any angle, and may be adjusted to upright jogging for lifts of stock as well as level position. Moves on ball-bearing casters. Attachable to any light socket.

T. W. & C. B. Sheridan Co. will exhibit at Display Space Nos. 162 and 163.

The Smythe Mfg. Co. will exhibit at Display Space No. 216.

Soldans, Ltd., will exhibit at Display Space No. 164.

Southworth Equipment A variety of equipment for the printing plant is to be exhibited by Southworth Machine Co. at Display Space No. 150. Included in the display will be the Southworth-Post Envelope Press, Southworth Power Corner Cutter, Southworth Humidifier, and the Southworth Super Portland Punching Machine with special punch heads for plastic binding work. The exhibit will be under the direction of Sales Manager Robert Colomy, assisted by Service Manager Gordon and Chief Engineer Roy Aberle.

Spiral Binding Machines Spiral binding machines and supplies will be included in the exhibit sponsored by Spiral Binding Co., Inc., at Display Space No. 200. Equipment to be shown will include the Universal Punching Machine and the SB6 Automatic Spiral Inserting Machine. Sample books of various

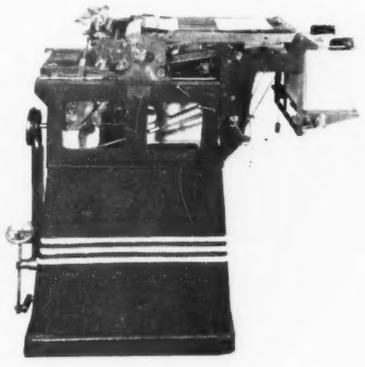
Sealing Machine—An automatic sealing machine designed for sealing folders, booklets, broadsides, enclosures, catalogs, letters, postcards, bulletins, etc., will be exhibited at Display Space No. 432 by Seal-O-Matic Machine Mfg. Co., Inc. It is claimed that Seal-O-Matic machine seals from 6000 to 15,000 pieces per hr. Sponsor states the machine will seal folders having from one to five folds, and measure from 2 in. by 4 in. to 9¼ in. by 13 in. It is also claimed the machine will seal booklets and catalogs up to ⅛ in. thick on practically any kind of paper. The machine is equipped with a counter for counting the number of pieces sealed. Circular seals may be punched from rolls of gummed tape of any color. Specifications: width, 2 ft.; length, 6 ft.; height, 45 in., and weight, 600 lbs.

binding styles of Spiral, Spiralastic and Kamket loose-leaf binding will also be on display. The punching machine will punch paper up to 3/16 in. thickness in a single lift. The inserting machine will automatically insert Spiral wire into books with from 2¼ in. to 15 in. binding edge and thicknesses up to 13/32 in. Company states the machine will Spiral bind books at the rate of 1000 per hr.

Edwin B. Stimpson Co. will exhibit at Display Space No. 358.

Stoessel Cylinder Press

The Stoessel 9 in. by 12 in. Flatbed Cylinder Press will be in operation at Exhibit Space No. 368, sponsored by Stoessel Machine Mfg. Co., Inc. The



Stoessel 9 in. by 12 in. Flatbed Cylinder Press to be exhibited at Display Space No. 368.

press is designed to print letterheads, folders, cards, circulars, envelopes, etc. Specifications: width, 20½ in.; length, 44 in.; height, 21 in.; inside chase measurements, 9¼ in. by 12¾ in.; max. size form, 9 in. by 12 in.; min. size form, 3 in. by 5 in.; speed, 1500 to 5000 i.p.h. The exhibit will also display murals of Stoessel's Sheet Fed Gravure Press, Web Rotogravure Press, Gravure Laydown Machine and Gravure Proof Press.

Stone Printing Equipment, Ltd., will exhibit at Display Space No. 166.

Strong Printing Lamps

The Strong 140 amp. Horizontal Frame Printing Lamp will be displayed for the first time by the Strong Electric Corp. at Exhibit Space No. 292. The lamphouse is designed so that it burns the carbons in the same manner as the vertical frame printing lamp and utilizes a 45 deg. angle mirror to direct the light rays in a downward path to the work surface. A model of the same lamphouse for large vertical printing frames and the Strong 95 amp. Camera Lamp, will also be shown. Personnel in attendance at the display will include Carl A. Starks, Harold E. Brown, Hank Wiener, Carl M. LaPlante and Arthur J. Hatch.

Super Speed Printing Machinery Co., Inc., will exhibit at Display Space No. 340.

Heidelberg Sales and Service

Display Spaces Nos. 318 to 327 inclusive will be occupied by Heidelberg Sales and Service (Super Speed Printing Press Co., Inc.) On display and demonstration will be five 10 in. by 15 in. sheet size Original Heidelberg and three 12 in. by 18 in. sheet size Heidelberg Presses of the latest type. The presses will be operated with ordinary black and white jobs and on color process work.

Machinery Moving-Erecting

The Taft Contracting Co., 1125-1131 West Adams St., Chicago 7, will occupy display space No. 223. Taft plans to staff its exhibit with people qualified to discuss with exhibitors any installation problem, or related mechanical or technical questions. President E. S. Potter states Taft Contracting Co. has served the printing trades continuously for 62 years. The firm specializes in erecting and dismantling printing machinery as well the solving of all problems arising from installation and moving. In addition to skilled machinists and riggers, states Mr. Potter, Taft implements its service with heavy hauling equipment, industrial power tools collateral to hoisting, lowering, and the like.

Taylor Registerscope

The Taylor Machine Co. will exhibit in Display Space No. 379 a device which adapts optical principles to speed up form makeup and register. The company will request visitors to use the device to see how it enables the user to achieve fast, accurate makeup and register of a form before it goes to press. In addition, Taylor will display its Registerscope Junior, for registering forms for smaller presses. Arthur K. Taylor, the inventor of the device, with his son, Richard R. Taylor, will be on hand at the Exposition.

Technical Trade School

The Technical Trade School of Pressmen's Home, Tenn., has an educational exhibit in Booth No. 329, according to Director Thomas E. Dunwody. Principally, the exhibit will consist of work produced in the School and views of Pressmen's Home.

Tenak Products Co. will exhibit at Display Space No. 400.

Thompson Cabinet Co. will exhibit at Display Space No. 189.

Thomson-National Presses

Three different Thomson Cutting and Creasing Presses will be in operation by Thomson-National Press Co. at Exhibit Space No. 438. One of these will be the 17 in. by 25 in. Thomson Automatic Press with a Chandler & Price type of feed and delivery, which will be shown daily with an actual job running. Recommended cutting or embossing load on the latter mentioned press is 75 T. and average running speed is 2400 i.p.h. Other presses to be included in the exhibit is the Thomson 22 in. by 32 in. Crank-Action Type and the Thomson 28 in. by 41 in. Eccentric Action Type.

Ti-Pi Company will exhibit at Display Space No. 344.

Tompkins Printing Equipment Co.

A demonstration of the Unisorb method of anchoring printing machinery to all kinds of floors for the control of vibration and noise will be featured by Tompkins Printing Equipment Co. at Exhibit Space Nos. 234 and 236. Challenge, Chandler & Price, Banthin, Hamilton, Hammond, Nolan, Morrison, Rosback and Rouse equipment and supplies, handled by Tompkins, will also be displayed. Representatives from both the Chicago and Detroit offices will be on hand.

Transkrit Corporation will exhibit at Display Space No. 350.

Turner Printing Machinery, Inc., will exhibit at Display Space No. 338.

United American Metals

The Little Chief Remelter and the single unit, twin-type, water-cooled mold for use in the smaller printing plant will be exhibited by United American Metals Corp. at Display Space Nos. 304 and 305. The Big Chief Remelter with the Dumperin attachment for the larger plants will also be exhibited. Both equipments will be in operation.

U. S. Rubber Co. will exhibit at Display Space No. 176.

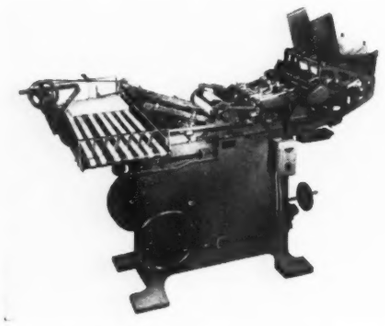
Vandercook Equipment

Vandercook proof presses and pre-makeready methods and equipment will compose the exhibit sponsored by Vandercook & Sons, Inc., at Display Space Nos. 262 and 263. About one-third of the space will be devoted to a typical Pre-Press Dept. where demonstrations will be held on how precision forms can and should be made up. Equipment for making metal base will be shown as well as a new method for mounting halftones and electrotypes. Also demonstrated will be Vandercook Plate Gauges, Make-Up Gauge, Line-up Gauge, Block Leveller and Test Press for forms up to 42 in. wide.

The 5 T. Vandercook 4-Color High Speed Proof Press which, it is claimed, turns out a wet proof within 3 sec. from first to last color, will be demonstrated. Other equipment at the exhibit will include the Vandercook 29-24 High Speed Power Proof Press, the 219AB and 219 ABT Proof Presses with adjustable beds, 22-34 Automatic Inking and Dampening Offset Proof Press, High Speed Safe Electric Galley Proof Press, Hand Operated Galley Proof Press, No. 4 Proof Press for pulling reproduction proofs and a number of smaller hand operated machines.

Verner Presses

Of interest to printers concerned with printing envelopes, imprinting all types of dealer literature and printing small job forms, will be two presses operated by B. Verner & Co., Inc., at Exhibit



The Model FM Multipress will be in operation at Exhibit Space No. 408 sponsored by B. Verner & Co.

Space No. 408. These presses, the Model FM Multipress, have a speed of 6500 i.p.h. A continuous feeder is designed to handle stock ranging from paper to booklets, and envelopes and flat folded cartons from 2 in. by 4 in. to 9 in. by 12 in. Specifications: length, 5 ft., 8 in.; width, 18 in.; height, 4 ft.; weight, 1200 lbs.; motor, ¾ h.p.

Virkotype Equipment

A demonstration of equipment used in producing raised printing under actual pressroom conditions will be seen at the exhibit of the Virkotype Corporation, Booth 161.

A Virkotype Model A-12 Heavy-duty, Automatic Process Machine will be in operation in conjunction with an ATF Little Giant high-speed, cylinder press. On display will be a Model V-12 Virkotype Automatic Process Machine designed for the stationers and job shops. The Model H Hand Process Machine will also be exhibited. The operating display will produce color charts in Virkotype raised printing.

Walden, Sons & Mott, Inc.

Walden, Sons & Mott, Inc., 41 Park Row, New York 7, N. Y., publishers of *Printing Magazine*, *Printing Year Book & Almanac*, *Paper & Paper Products*, *The Paper Catalogs*, *Walden's A B C Guide* to the paper industry and *The Paper Production Year Book*, will occupy Booth No. 231 for the display of its various Graphic Arts publications. Will present the special Exposition Edition of *Printing Year Book & Almanac* in its enlarged 8½ in. by 11 in. format.

Walton Humidifiers

How to Cut Production Costs with Adequate Humidification is the theme of the exhibit of Walton Laboratories, Inc., at Display Space Nos. 194 and 195.

The company will exhibit its complete line of industrial humidifiers. Walton Humidifying Units will be in actual operation in the booths.

The large Model 30 which evaporates into the air 3 gals. of water per hr., the Heavy Duty models which evaporate into the air 1 gal. of water per hr., and the small Junior and Commercial models which evaporate ½ gal. and 1½ pts. per hr., respectively, will be on exhibition.

Walton engineers will be on hand to answer all questions pertaining to controlled humidification and to assist in solving dry air problems.

Wesel Mfg. Co. will exhibit at Display Space No. 348.

Western Newspaper Union

Equipment and supplies for the Graphic Arts industry will be on display at Exhibit Space Nos. 345, 347 and 349 by Western Newspaper Union. The exhibit will consist of such equipment as the Acme-Morrison stitcher; Challenge paper drilling machines and proof presses; Doyle infrared heater; Chandler & Price 12 in. by 18 automatic press; Hamilton type and galley cabinets and imposing tables; Hammond TrimOsaws, Easy-Kasters and routers; Rosback Vari-Speed Pony Rotary perforator; Rouse Vertical Power mitering machine and miscellaneous supplies, and Sullivan Dry Spray equipment.

In addition to other WNU personnel in attendance at the Exposition will be W. W. Brown, Vice President and General Manager; E. L. Walters, Vice President and Purchasing Agent; and Darwyn C. Jackson, Manager of the Omaha Printing Machinery Div. The exhibit will be supervised by F. A. Freeman, Manager, and E. C. Kehe, Sales Manager, of WNU's Chicago office.

Martin J. Weber Studio

In Display Space No. 397, Martin J. Weber Studio, whose business is creating advertising illustration and industrial design, Graphic Arts planning and production. The theme of the exhibit will be Graphic Arts Pictorial Production for letterpress, offset and gravure produced by photo-mechanical means through the Weber Process. The display will be attended by Edward Feldman, Stanley Beck and Martin J. Weber. Literature will be distributed to callers. Weber furnishes a number of services including step-and-repeat negatives, drop-out halftone negatives for offset and letterpress and drop-out full-tone negatives for gravure and a number of other types of work, all produced photographically.

Wetter Numbering Machine Co. will exhibit at Display Space No. 333.

Wild & Stevens Equipment

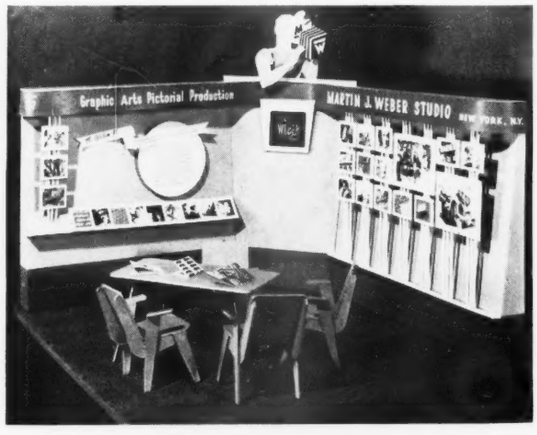
The Sesco Low Pressure Offset Spray Gun and the Browne Pressroom Control, a pressroom control panel, will be shown by Wild & Stevens, Inc., at Exhibit Space No. 191. The Sesco head of the offset spray gun is designed with two separate units, one for the air and the other for the solution. Sponsor claims that 5 or 6 lbs. of air pressure is required for the solution chamber and that emulsification of air and solution in the head will not occur. The Browne Pressroom Control is an electrical control panel, designed with a system of lights and operation time recorder clock, which reports visually and statistically the running time, press speeds and dead time of each unit in the pressroom.

Williamson Molding Presses

A 185 T. Platemaster Molding Press, designed for molding plastic plates, rubber plates and Vinylite electrotype molds, will be in operation at Display Space No. 374 by Williamson and Co., Inc. Materials used in the production of rubber and plastic printing plates for letterpress printing will also be exhibited. Demonstrations of the molding of these plates with Williamson equipment will be made at regular timed intervals.

Specifications of the 185 T. Platemaster: height, 57 in.; width, 46 in.; depth, 57½ in.; platen size, 24 in. by 24 in. by 2 in. or 26 in. by 30 in. by 2 in.; daylight opening, 4 in.; ram, 20 in. diam. cast meehanite, and weight, 9000 lbs.

Representatives of the Williamson organization to be on hand at the exhibit will include Eugene Williamson, President, George P. Walker, Sales Manager, W. S. Piggins, N. Kosh, H. B. Vreeland and W. K. Anderson.



Reduced size engraving of miniature model of exhibit to be shown by Martin J. Weber Studio at the Graphic Arts Exposition.

Justowriter equipment consists of two units (the Recorder and the Reproducer), each fitting into a specially built desk, 25 in. by 38 in. Retyping is automatic by use of perforated tape.

Commercial Controls Justowriter

In Display Space No. 104, Commercial Controls Corp. will exhibit and demonstrate its Justowriter equipment. The Justowriter equipment consists of two units—one is a motor-driven typewriter (called the recorder) upon which the operator types copy on a sheet of paper just as is usually done on a single-face electric typewriter. Simultaneously and automatically, a narrow paper type is punched with coded perforations. When sufficient tape has been punched, it is inserted in the second unit (called the reproducer). The reproducer automatically types the first typing as represented by the tape which actuates it. The lines are typed to the even line length desired and the word spacing is evenly distributed in each line. Several different type faces are available with letters differentially spaced.

Blower Type Unit Heater

USED where specifications call for squirrel cage, centrifugal type or multi-bladed blower, is a blower type unit heater announced by Reznor Mfg. Co., Mercer, Pa. Sponsor states the heaters are sound-proofed and cushioned in rubber and felt to deaden vibration. Heaters are equipped with summer and winter switches. Available in eight different sizes. A belt drive is used on larger size heaters; direct drive with variable speed control is used on 50,000 and 25,000 b.t.u. sizes. Other sizes controlled by variable sleeve pulley.

Nygren-Dahly Bindery Equipment

Perforating, paper drilling, punching and tab cutting machines will comprise the exhibit of the Nygren-Dahly Co. at Display Space No. 342. Equipment to be exhibited includes: a rotary slot hole perforator complete with McAdams air wheel pile feeder and jogger; multiple spindle paper drill; single spindle paper drill; extra heavy power punching machine; tab cutting heads; 24 in. rotary slot hole perforator, and 22 in. combination slot and round hole rotary perforator. Henry C. Nygren, President of the company, will be in charge of the exhibit.

Adopts Bulletin as One of Own

In the April issue of *Printing Equipment Engineer* was reviewed briefly *Basic Requirements for Electrotypes*. The bulletin is a carefully prepared explanation of the proper ways and means for preparing forms for electrotyping, including engraving, composition and lockup standards. It was prepared under the supervision of the Intl. Assoc. of Electrotypers and Stereotypers. The Research and Engineering Council thinks so well of the publication that it is calling attention of *Basic Requirements for Electrotypers* to the R&E Council membership. Chairman Frank F. Pfeiffer suggests members consider establishing a program of education for all the personnel in their plants concerned with the steps covered by the *Basic Requirements for Electrotypes* bulletin. Mr. Pfeiffer also comments: "If each plant in the industry were to follow this step and, through constant supervision, see that the recommendations contained in this publication are carried out as minimum specifications, a number of our problems, which are not dependent upon basic research for solution, would be overcome."

Newspaper Bundle Tyer

A SELF feeding, self operating, self ejecting newspaper bundle tying machine using sisal, jute or hemp twine up to $\frac{3}{16}$ in. diam., has been announced by National Bundle Tyer Co., Blissfield, Mich. The machine ties stacks of loose papers under compression up to 600 lbs., or round bundles of one copy or more without compression in any sequence, without mechanical adjustment.

The machine is designed to receive loose papers in stacks up to 18 in. high, either manually fed or direct from a conveyor line. Tied bundles are automatically ejected to a chute or conveyor line. Bundles may be single or double tied or cross tied with a non-slip bow knot, at the option of the operator. The tie is automatically adjusted to the size of the bundle. Speed of machine with feeder attachment is 18 to 20 ties/min.

Knot tying device only, powered by $\frac{1}{4}$ h.p., a.c. or d.c. motor. Packer, feeder and ejector are controlled by compressed air. Machine is mounted on ball bearing swivel casters. Automatic floor brake for reducing vibration while in operation. Specifications: weight, approx. 900 lbs.; table top, 2 ft. 8 in. by 5 ft.; height at highest point, 6 ft.; height of table from floor, 34 in.

National Newspaper Bundle Tyer for tying stacks of loose newspapers up to 18 in. high or round bundles of one copy or more.

NEXT TWO CONFERENCES

Cities, hotels and meeting dates have been selected for the 1951 and 1952 ANPA Mechanical Conferences. Edwin H. Evers, Chairman of the ANPA Mechanical Committee made the announcement at the recent Buffalo meeting.

The 1951 conference will be held at Edgewater Beach Hotel, Chicago, on June 11, 12 and 13.

The 1952 conference will be held at Fairmont Hotel, San Francisco, in June.

Equipment & Supplies

Macey Collator

A MOTOR-DRIVEN collating machine, which is said to gather more than 25,000 sheets of paper into sets of eight in an hour's time, is being manufactured for and distributed by Harris-Seybold Co., 4510 E. 71st St., Cleveland 5, O.

Max. sheet size for the Macey Collator is 9½ in. by 12 in., with a min. of 5 in. by 8½ in. The machine has handled stock ranging from 9 lb. to ⅛ in. cardboard, both plain and punched. It is also being used to gather 6 page forms which have been stitched and folded to 9 in. by 12 in. size.

The Macey Collator can be operated by one operator.

Built on the conveyor principle, the Macey Collator consists primarily of eight hoppers or feeding stations at the rear of a slanted stainless steel tray. As is shown in the illustration, the conveyor is at the front of the machine. Pins projecting upwardly from the stainless steel tray convey each sheet to be assembled toward the left. Thus, the last sheet in the assembly in the last hopper at the right is the first to be deposited by the sucker delivery arm in the tray at the front. As the first sheet (which is the last in the assembly) moves to the left and reaches the next to the last feeding station or hopper, the next to the last sheet (which is also the next to the last sheet in the assembly) is deposited upon the last sheet which was deposited first upon the stainless steel tray. The order of assembly is repeated in progression as explained above until the first or cover sheet is deposited upon the assembled pile. The complete assembly is then delivered into a receptacle at the extreme left end of the Collator.

The individual feeding stations are self-leveling, keeping the top sheet at proper height for separating and feeding regardless of weight of stock. Each station will accommodate a stack of paper 11½ in. high of about 3000 sheets of 20 lb. stock.

To avoid gathering double sheets, suction is employed to pick up each sheet, simultaneously separating it from others in the pile with a blast of compressed air. As an additional precaution, an automatic detector checks each completed set, stopping the machine if there is an extra sheet or if one is missing.

The machine will collate up to eight sheets per set, or individual stations can be turned off and any number of sets from two to eight can be gathered. If there are more than eight sheets, the additional sheets can be collated by the Macey Collator and the completed groups assembled by hand. One plant is reported to be using the Collator for assembling sheets for a 10,000 quantity of 250 page loose-leaf notebooks, 8 pages at a time.

Macey Collators have been installed at Harris-Seybold's offices in New York, Cleveland and Atlanta. A machine to be installed in the Chicago office will be demonstrated to those attending the Graphic Arts Exposition, September 11 to 23.

Keith S. Macey, Cleveland designing engineer, standing before the Macey Collator, which is being manufactured for and distributed by Harris-Seybold Co. Machine is motor-driven, will collate up to 9½ in. by 12 in. sheets, stock may range from 9 lb. weight up to ⅛ in. cardboard. Min. sheet size is 5 in. by 8½ in. Will gather from two up to eight sheets as required.

Cordan Leather Belt

THE Cordan Flat Leather Belt, states S. R. Sikes Co., 1028 So. Third St., Minneapolis 15, Minn., is provided with controlled stretch which prevents permanent elongation of the belt under load, thereby eliminating slipping. Company states the non-stretching advantage of fabric belting and the greater pulley grip of leather are combined in the belt.

The belt is reinforced with synthetic cords placed between the leather plies by a special process. The cords are claimed to provide the added resiliency necessary to prevent the leather from stretching beyond a certain point under load and to return the belt to its true length when not under load.

Cordan Leather Belt is said to be waterproof. Manufacturer announces that many Cordan flat leather belts have been in operation for over six months without adjustment or shortening.

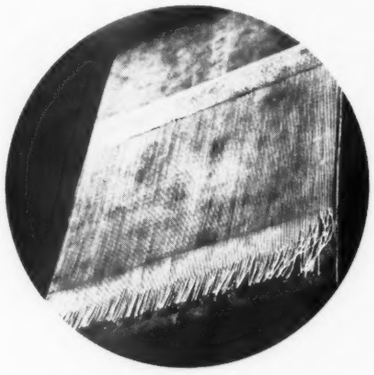
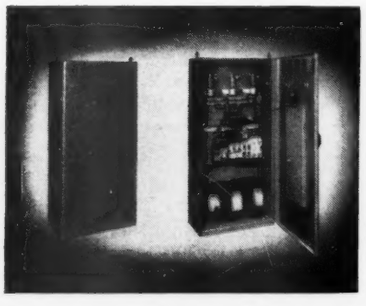


Illustration shows construction of Cordan flat leather belt. Belts are constructed from two plies of leather. Synthetic cords are laid in grooves cut in the leather to hold the cords in alignment and to furnish the non-stretch qualities of the belt. The plies and cords are cemented under pressure with waterproof cement until dry.

Cordan belting is available in widths from 1 in. to 24 in. Belts may be obtained with square ends for lacing, or endless before shipping, or with prepared splices ready to be glued together by the user.

The flat belt is made only in two-ply thicknesses. Narrow belts usually travel at higher speeds over smaller pulleys and for that reason they are made of lighter weight leather. The wide belts are made of heavy leather.



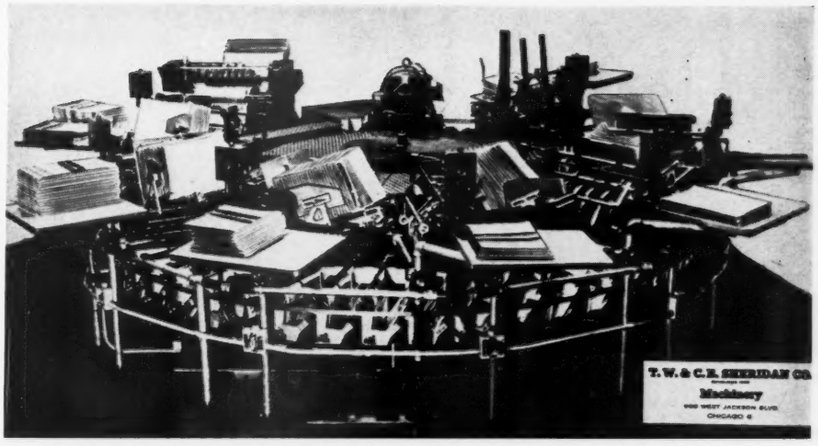
Westinghouse Electronic Rectifier Units—Floor or wall mounted electronic rectifier units, designed to convert a.c. to d.c. for general purpose industrial and commercial applications, are available from Westinghouse Electric Corp., Box 2099, Pittsburgh 30, Pa. Standard units are available with constant or adjustable d.c. output voltages, in ratings as high as 230 v. 87 amp. Sponsor states the adjustable voltage units provide a range of from 60 to 100 per cent of rated output voltage.

Sheridan Newspaper Stuffer

UNDER proper conditions, it is said the Sheridan Automatic Newspaper Stuffer will assemble 12 thousand 8-section newspapers per hr. However, various conditions in the mailroom might slow down average production to a somewhat lower figure. This equipment is a round shape rotating machine for stuffing standard size newspapers. T. W. & C. B. Sheridan Co., Inc., 135 Lafayette St., New York 13, N. Y., developed the machine. Information in this article supplied by Sheridan and partly by a recent ANPA Research Bulletin.

Beneath eight stationary feeding stations 48 pockets rotate. In each pocket is deposited the desired number of newspaper sections from the stationary feeding stations to assemble automatically a completely stuffed newspaper. Any number of separate sections up to eight sections can be assembled. This means that seven sections are assembled inside of one section. In cases where there are more than eight sections to be assembled, the feature sections are stuffed in advance These pre-stuffed sections are then included to make a complete paper on publication day.

The sections are dropped from the stationary feeding stations (according to the number of sections up to eight) into the rotating pockets automatically. The pile containing the jacket or outside section of the newspaper is placed in the first feeding station. Consequently, these sections are the first to be dropped into a pocket. A vacuum suction cup attached to the pocket opens the jacket of the section; a gripper finger holds the jacket section in open position to permit the other sections to fall into it while the pocket rotates under the stationary feeding stations each containing a section to be deposited in the jacket section.



View of Sheridan Automatic Newspaper Stuffer.—Top operating speed of 12,000 eight-section newspapers per hr. is claimed. Any number of sections up to eight may be stuffed. The driving motor is visible at the back of the machine.

After all of the separate sections have been deposited within the opened jacket, the suction cup and the gripper finger release their hold on the jacket. The bottom of the pocket containing the assembled paper opens and the paper is delivered onto a conveyor.

The delivery conveyor is adjusted to turn the stuffed (assembled) papers, so that when they arrive at the delivery point, the fold of the jacket is exposed on top to facilitate picking up the papers by the mailer. An oscillating delivery pusher gives the assembled paper an initial push as it drops on the conveyor, thus eliminating possibility of papers piling up or choking the machine.

When the mailer picks up a number of papers from the conveyor, he is guided by kick sheet which is the same as used on standard newspaper press deliveries. One corner of the kicked-out paper sticks projects from the side and another corner is visible above the head folds of the other papers. This double visibility is intended to insure exposure of jackets narrower than the inside sections and permits the mailer to pick up a pile of assembled newspapers from either side of the delivery conveyor.

Micron Microscope Measures Depths

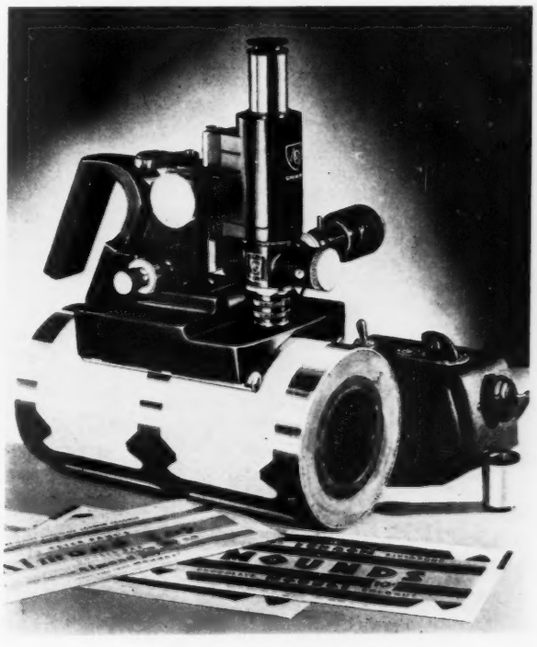
THE AO Gravure Microscope permits more accurate control of gravure printing and plate making processes, states American Optical Co. Instrument Div., Buffalo 15, N. Y. In the instrument is incorporated a microscope optical system equipped with special measuring devices which provide readings of the depth and width of gravure plate cells with consistent accuracy of plus or minus one micron, approx. 1/25,000 in. The microscope may be used in controlling quality of etching in addition to adjusting ink consistency to plate wear.

The instrument may be placed directly on gravure rolls 4 in. diam. or larger—either on or off the press. For rolls smaller than 4 in. diam., an accessory stand will be available. Plastic inserts prevent damage to the rolls. The instrument also can be set directly on flat plates.

The microscope, developed at the suggestion of the Peter Paul Candy Co., Naugatuck, Conn., is also of value to photoengravers, letterpress and offset printers.

Depth measurements are made at a magnification of 600X by focusing the microscope on the bottom of the cell and setting the graduated micrometer fine adjustment knob to zero. The top of the cell is next brought into focus and the scale reading indicates cell depth directly in microns or in ten thousandths of an inch, if desired. Cell width and line screen are measured with a micrometer eyepiece.

A controllable light is provided by a built-in vertical illuminator. A swing-out magnifier enables the gradations on the micrometer to be seen clearly and read accurately. Maker claims no special skill is required to operate the new microscope.



American Optical Co.'s Gravure Microscope mounted on a rotogravure printing cylinder. Instrument measures depth and width of gravure etched cells in microns (approx. 1/25,000 in.).

The ABC of OFFSET

For Letterpress Printers

By George Jos. Lenzer

VII—THE LENS

THE finest camera ever built is of little or no consequence if the lens is missing, or is of poor quality, imperfectly ground or improperly corrected.

A lens is a transparent medium having two opposite regular surfaces which forms an image by changing the direction of rays of light.

The purpose of the lens is to project an image of an object, Fig. 11. A process lens must be designed to refract the light in such a manner that the light rays reflected from any point of the object, irrespective of where they fall upon the lens, will meet, forming an image of the point. The extent of light refraction possible depends upon the curvature of the lens surfaces, the thicknesses of the lens, and the kind of glass of which it is made.

Optical glass from which lenses are made, is given tests to prove the chemical homogeneity of the substance and to determine the refractive index, before grinding and polishing is begun. As a result of the manner in which the glass is made and processed, lenses may be seen upon inspection to contain many fine air bubbles. These, however, do not affect the photographic qualities of the lens.

The lens is the seeing complement of the camera, or its eye.

Every point on an object emits light rays in every direction; these may originate within the object itself or be reflected from it. The function of the lens is to collect the diverging light rays, redirect them through refraction and to project them so that they converge at the back of the camera in the form of an image of the original object.

In order to provide a sharp, accurately proportioned image of the original copy, the lens must be corrected for color astigmatism, and other defects, and is ground to an accuracy of a fraction of one millionth of an inch (within ¼ wave length of light), and is assembled to about 0.001 in. (within 1 to 10 microns).

The lens is composed of several glass elements with different refractive indices, ground to specific curvatures, and mounted in accurate relation to each other, according to a complicated formula. By this formula each type of curvature distortion is balanced against the others to minimize the distortion of the image on the negative.

How curvature distortion is balanced, is demonstrated by the combining of two or more of the simple lenses as illustrated at G and H in Fig. 12. These simple lenses are classified as follows:

Convergent or Positive:

A. Plano-convex.
B. Bi-convex.
C. Convexo-concave (Meniscus).

Divergent or Negative:

D. Plano-concave.
E. Bi-concave.
F. Concavo-convex (Meniscus).

G. Achromatic pair.
H. Aplanat.

Because of necessary faults in their shape and by reason of the nature of light, simple lenses cannot render a true image of a subject point for point. No matter how perfectly they are focused, the images will appear to be blurred, with the middle of the image appearing sharper than the outer edges, and the image of bright objects will be fringed with color.

The quality of any photographic lens is dependent largely upon the degree to which inherent shortcomings, called *aberrations*, are reduced or have been entirely removed. An aberration is the effect of an optical error and results from the deviation of light from its desired path through the lens to the image. There are seven aberrations which are common to lenses such as those illustrated, and are generally corrected in high grade photographic lenses.

These aberrations are: (1) Chromatic, (2) Spherical, (3) Coma, (4) Astigmatism, (5) Curvature of field, (6) Curvilinear Distortion, and (7) Optical Flare.

In an anastigmat lens, the first six of the named aberrations are corrected except for the chromatic aberration. This correction is not perfect since red light rays focus a little beyond the focal plane.

An apochromatic lens, is an anastigmat lens in which correction for color has been carried out to such a high degree that, when used for critical color photography, objects of the same size produce images of exactly the same size regardless of their color. A properly corrected apochromatic lens permits the focusing of all rays of visible colored light on nearly the same plane. This is important in multi-color photography.

Some of the latest high grade photographic lenses are chemically treated on the surfaces exposed to air. This treatment greatly reduces optical flare which is present in all lenses. Optical flare is caused by reflections from the surfaces of the lens elements. This disturbing phenomenon can be reduced somewhat by the use of a suitable lens hood. Because aberrations have a direct bearing upon the efficiency of a process lens, they will be discussed in subsequent paragraphs and installments of this series.

A lens is generally classified by: (1) Focal length, (2) Speed, (3) Degree of color correction, (4) Degree of correction for astigmatism, and (5) Rate of coverage and resolving power.

FOCAL LENGTH—If we place two prisms together base to base as in Fig. 13, we can bend rays of incident light when they enter the glass and also again when they leave the glass, so that they come together again to form an image. A lens embracing this general principle is a converging lens because all light rays passing through it parallel to its axis are brought to a focal point behind the lens. The distance from the focal point to the

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APOLOGY

The author of the series, *The ABC of Offset for Letterpress Printers* currently appearing in *Printing Equipment Engineer*, failed to give full credit to other authors and reference sources in the chapters already published.

These omissions were not intentional since a complete bibliography was to have been printed in the final chapter of the series. The writer apologizes for these omissions in the previously published chapters.

In succeeding installments all references will be credited as published.

Below appear the authors and/or sources of reference material already used:

Herbert P. Paschel, *Choosing a Process Camera*, Chap. VI, June *Printing Equipment Engineer.*

Modern Lithography, February-June 1946 issues, (Paschel) Chap. VI. June *Printing Equipment Engineer.*

I. H. Sayre, *Photography and Platemaking for Photo-Lithography*, Chap. V and VI, May and June *Printing Equipment Engineer.*

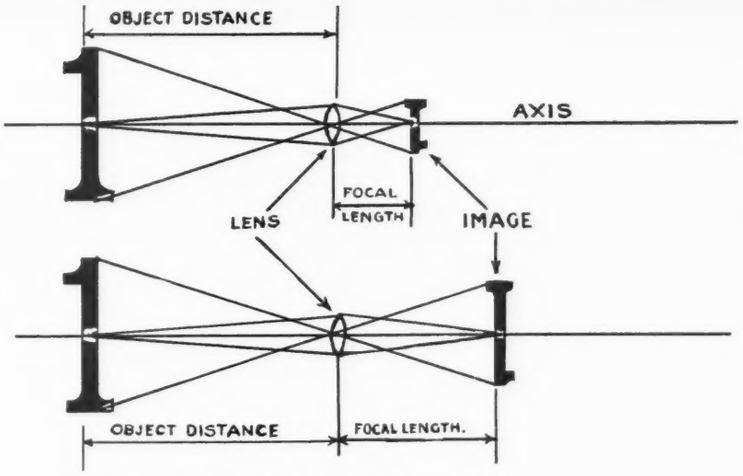
J. S. Mertle, *Process Photography and Platemaking*, Chap. V and VI, May and June 1950, *Printing Equipment Engineer.*

War Dept. Technical Manual, T.M.5-245, Chap. V, May 1950 *Printing Equipment Engineer.*

Eastman Kodak Co., *Kodachrome Photography*, Chap. V and VI, May and June 1950, *Printing Equipment Engineer.*

Lithographic Technical Foundation, Bulletins, Feb.-June inc. 1950, *Printing Equipment Engineer.*

GEORGE JOS. LENZER



OBJECT DISTANCE IN RELATION TO FOCAL LENGTH.

Fig. 11.

optical center of the lens is roughly the focal length, Fig. 15.

By inverting two prisms, slightly overlapping the apex points, Fig. 14, we can rely upon the same phenomenon of bending light rays. The difference is that the incident light rays pass through a lens of this type, so that they come to a focus at the outer edge rather than on the optical axis. A lens of this kind is called a divergent lens. The focal length of a divergent lens is an approximate complement to the focal length of a converging lens. To find the focal point and focal length of a negative lens, the refracted light rays are extended backward until they intersect upon the optical axis Fig. 16. Where the rays intersect upon the optical axis is the distance from the point to the optical center of the lens.

SPEED OF THE LENS is determined by two factors. (1) The diameter of the effective aperture which is, practically speaking, the width or diameter of the lens. More light will pass through a large opening than will pass through a smaller one; and (2) The bellows extension determines the distance the light must travel after passing through the lens aperture until it reaches the light-sensitive material. These two factors comprise the f/ system for determining lens speeds.

These f/ numbers are related to the light intensity at the film or plate and permit common exposure recommendations for all lenses. Example: If a large camera and a small camera are aimed at the same object and both lenses are set at f/11, the brightness of the image falling on both films will be the same. If the diaphragm number, which appears on the diaphragm collar on the lens barrel, is moved one stop, or from one f/ number to the next highest number in the series, you will reduce the light intensity progressively one-half.

Some of the newer lenses are coated or surface treated to reduce any undesirable effects in the image caused by light reflected from the polished surfaces of the lens. The result of surface treatment is that slightly more light passes through the lens at given f/ numbers even though the f/ numbers remain the same. In black and white photography with treated lenses it is not necessary to change lens settings, but about one-third of a stop less exposure will be required for color transparency or other processes where transparencies are the copy.

A newer development in lens speed determination is the T: stop system originated by Bell and Howell. Differences in the systems are: In the f/ system F: values are theoretical values, never quite obtainable in actual practice, due to transmission and reflectance losses of the lens. T: stop values are computed from actual light transmission measurements made with each individual lens. Because they are a computation of the lens' performance, they are more accurate than F: values.

Since the ultimate results vary only slightly, the F: and the T: systems are handled exactly the same way, except where a coated lens is used.

CHROMATIC ABERRATION — When a beam of white light is passed through a glass prism, it will be divided into colored rays of which it is composed. If a convergent or positive lens is used, the red ray, having the longest wave length, will come to a focal point at a greater distance from the lens than the violet ray which is the shortest in wave length. The other colors of the spectrum such as orange, yellow, green and blue will come to focal points at varying distances between the red and violet focal points. Since the colored waves converge at varying focal points when passed through a simple lens, the resulting image formed is blurred and indistinct, Fig. 17.

SPHERICAL ABERRATION—Due to the curved surface of the lens, spherical aberration may be defined as the in-

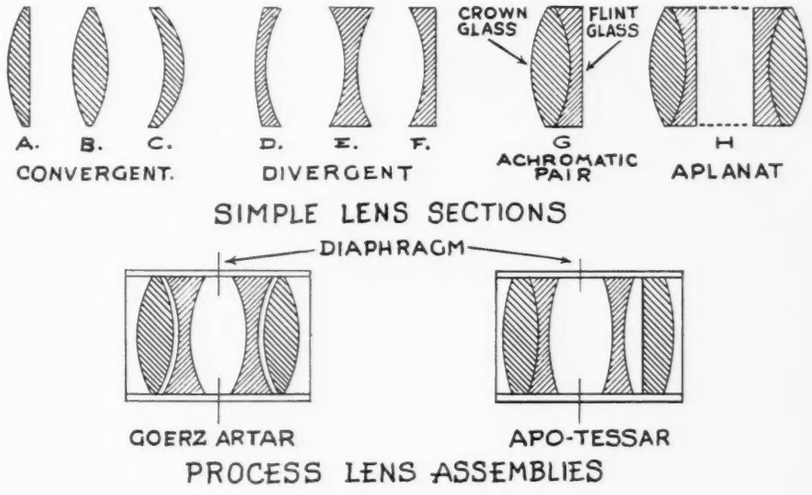


Fig. 12.

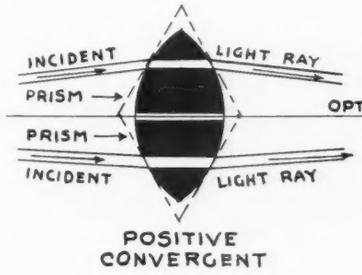


Fig. 13.

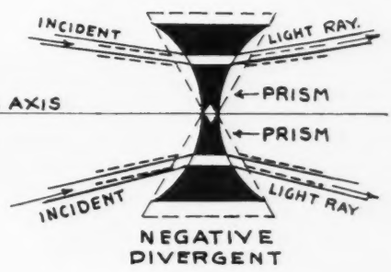


Fig. 14.

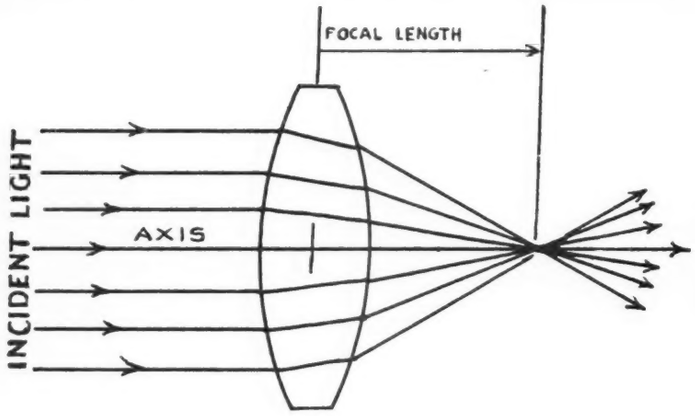


Fig. 15.

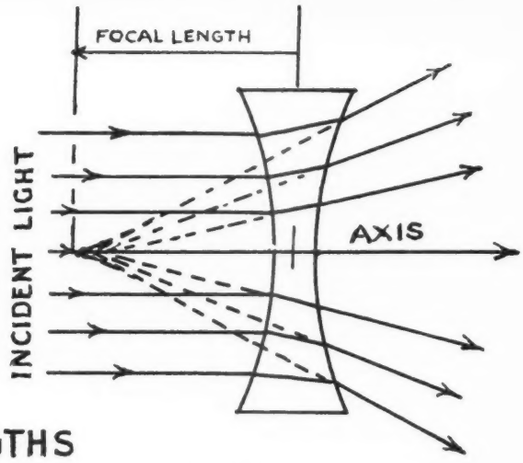


Fig. 16.

RELATIVE FOCAL LENGTHS

ability of the lens to bring the light rays which pass through its edges to the same focus as those which pass through the center. When light leaves the air and is passed through a solid substance, such as a glass prism, its speed is retarded. Since the outer edges of a positive or biconvex lens are thinner than the center, the light is less retarded than that passed through the center. Also, because the curvature of the lens is greater on the outer edges than in the center, the light rays passed through the outer edges are brought to a focal point nearer to the lens

combinations are determined by the amount of critical definition to be attained.

COMA—Coma is lens distortion resulting in oblique rays through the lens focusing at different points on the same plane, causing an image towards its margin to be distorted and to appear as a pear or comet shaped blur.

ASTIGMATISM — Astigmatism is image distortion resulting from incompletely corrected lenses. This distortion is caused by the lens bringing oblique rays of light to two focal points instead of to a single point of focus. Consequently, it is impossible to have both horizontal and vertical lines sharp at the same time near the margin of the image, although the center of the image may be distinct as in Fig. 18.

CURVATURE OF FIELD—Due to the spherical shape of lenses, the image of a flat object, such as a photograph, line drawing, illustration or a page of type, would not be formed on a flat surface such as a negative in true relationship to the original, but instead would render a curved reflection. When the center of the image is in focus the outer edges will be out of focus and vice versa. This phenomenon is known as curvature of the field and is corrected by making the focal length greater for the edges of the field than for the center.

DISTORTION—When a lens distorts, straight lines near the edges of an image appear to be curved. Curvilinear distortion is corrected by mounting two similar lenses at each end of the lens barrel and placing the diaphragm or lens opening between them.

That part of the lens resembling the iris of the eye is frequently called the iris of the lens. The opening in the diaphragm is called the aperture.

Care of the Lens

The lens is a delicate precision instrument, and can be permanently injured by careless handling or shock. It requires the most exacting care and attention.

ace than are those passed through the center.

A bi-convex lens gives positive aberration, meaning (the marginal rays are focused inside the central or on the optical axis) and a bi-concave lens will produce negative aberration, meaning that (marginal rays are focused outside the central or optical axis). So that a bi-convex lens may be corrected, a bi-concave lens may be used in combination. Such a combination may only partially correct the spherical aberration, and it may be necessary to add other lenses to complete the correction. The corrective

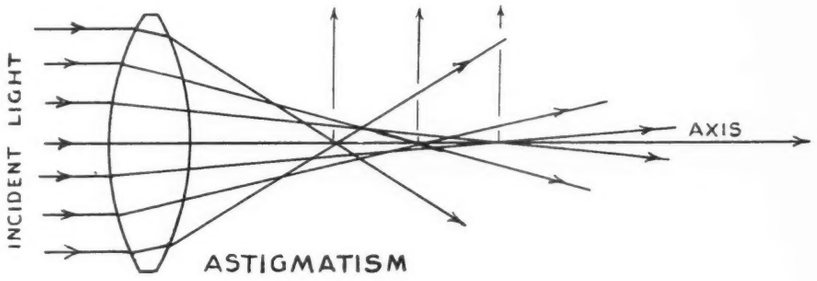


Fig. 18.

Typical Labor Saving Methods

(Abstracted from an address *General Management Principles* delivered before the 1949 Printing Alumni Reunion at Carnegie Institute of Technology, by Joseph Chanko, General Manager, Condé Nast Press, Greenwich, Conn.)

IT is more important than ever to study labor saving methods because of the increase in cost of labor. Here are some typical techniques which have been in use in our plant for many years: we have an Assembly Department in our Composing Room which coordinates all material, that is copy, layout, lino slugs, engravings including mounting, rules, initials, etc., so that a compositor need not waste any time looking. His work is makeup and composition which he does at his own frame. Nothing is released to the compositor until all of the components have been assembled. You can readily appreciate that much time is saved this way. In the Press Room we have introduced Preparation as an operation, in addition to pre-make-ready. By preparation we mean a study of the form before it goes to press, assembly of all proofs, instructions, etc., preparation of mechanical overlays, then placement of electros in their respective imposition on a flat skid. This means that when a pressman is ready to put a form on the press he has all the information and material required to proceed without delay.

The filter slot in the lens barrel must be kept closed and the lens cap attached at all times when the lens is not in use. Cleaning must be held to a minimum. When cleaning is necessary, dust the lens with a camel's hair brush used for this purpose only, then breathe on the lens and wipe carefully with lens tissue. The lens is taken apart for cleaning only when excessive dust accumulates on the inner surfaces. This should be done only by someone experienced in handling and cleaning lenses.

The lens should not be subjected to direct sunlight, excessive heat, moisture, injurious acid fumes, or physical damage. Prolonged exposure to direct sunlight, heat, or moisture may cause the lens elements to separate and allow air to enter between them. This will create an adverse refraction of light rays, resulting in an inferior image projection.

Lenses should be stored in a dry place of moderate temperature, in a suitable container, preferably capped.

In warm and humid climates, special attention must be given in the care of the lens, especially in cleaning. Here the lenses must be cleaned more often in order to prevent the formation of fungus growth. The lens should be carefully inspected at least once every 30 days for any possible trace of fungus.

Important—Do not attempt to take a lens apart. If adjustment of the lens or mounting is required it should be brought to the attention of an experienced camera repairman.

(*To Be Continued*)

Rotary Plate Shaver

THE Model D Plane-O-Plate Rotary Shaver was especially developed for the moderate size daily newspaper, commercial printer, paper converter, stereotyper, photoengraver and plastic platemaker. The Monomelt Co., Inc., 1611 Polk St., N.E., Minneapolis 13, Minn., says it is designed for precision shaving of metal, wood and plastic printing plates.

A feature of the machine is the 10 tooth, one-piece, high speed, helical angle cutter of molybdenum steel, mounted in Timken bearings and adjustable for pre-load. The machine is designed with a 17 finger hold-down bar with each finger under individual spring tension, for holding one or more plates to the cutter table under uniform pressure as they pass under the cutter even though they may vary in height.

A hand locking clamp, states the sponsor, eliminates any tendency of the table to lower under shaving pressure. Other features of the Model D include: a lightweight, streamlined mechanical dump for collecting shavings; shaving throwing collar for deflecting shavings and eliminating clogging of the cutter; lead screw safety relief to insure against damage to miter gear drive and feed mechanism; heavy duty limit switches which control the forward and reverse travel of the table; safety bar which automatically stops the machine if too deep a cut is attempted; and a rubber covered rear roller hold-down.

Model D Plane-O-Plate Rotary Shaver, announced by The Monomelt Co., Inc., is designed for shaving metal, wood and plastic printing plates.

Fuchs & Lang Calendar

Fuchs & Lang Mfg. Co., Div. of Sun Chemical Corp., has issued a mid-year calendar lithographed in 24 F&L standard colors. Two different colors are used on each page of the 12 page calendar. A chart at the top indicates the range of effects obtainable with the two colors as solids or tints, used either singly or in combination. According to E. G. Schreibeis, General Manager, the calendars will be distributed by F&L representatives.

Accident Prevention for Printing and Publishing

The Printing and Publishing Section of the National Safety Council will hold its third annual meeting at 2 o'clock in the afternoon of October 19, in the West Ballroom of the Stevens Hotel. This annual meeting and program is part of the National Safety Congress and Exposition.

M. B. Pittman, Safety Director, Standard Register Co., Dayton, who is the general chairman of the Printing and Publishing Section, reports a fine program for the meeting. Miss Lillian Stemp will discuss hazards in the bindery.

Safety in the pressroom is the subject to be discussed by K. Y. Umberger, Personnel Manager of the Kingsport Press, Kingsport, Tenn.

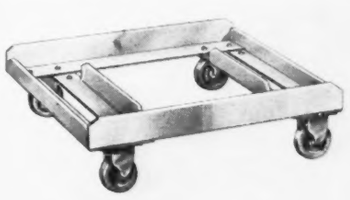
Richard Squires, Engineer for the National Publishing Co., Philadelphia, has prepared the program for the Congress. In his search for an authority on guillotine cutters, he found Lloyd Werth, Safety Leader for the Paper Finishing Dept., Eastman Kodak Co., who will discuss the operation and maintenance of knife cutters.

Following there will be a panel-and-audience discussion on general problems of accident prevention and fire control.

Further information may be obtained by writing to the National Safety Council, 425 N. Michigan Ave., Chicago 11.

Direct Mail Blotters

General Printing Ink Co., Pacific Coast Div. of Sun Chemical Corp., has issued a direct mail series of colorful, die-cut blotters. Each blotter carries a sales message and business reply card to be sent in for data on inks and color. The reply card is inserted between the blotter and has to be pulled out to get the full benefit of the illustration appearing on the face of the blotter.



Truck for Galley Cabinets—In response to requests for providing some means whereby loaded galley cabinets can be moved from one location to another, Hamilton Mfg. Co., Two Rivers, Wis., has developed a galley truck. The casters are widely spaced to lessen the danger of accidents. Substantially built and is supplied with large easy rolling wheels.

Fig. 2.—View of indicator mounted at the machinist's bench. In the picture is Anthony J. Stanzione, who developed the means for indicating when a line-composing machine has stopped. The dark ring on the dial is painted red and the three radial stop lines are white.

Selsyn Motors Utilized to Indicate Machine Stops

IN many composing rooms where the machinist's bench is located at one side or end of the battery, it is not always possible for the machinist to note if a machine needs attention because of a distributor stop or other cause which will stop the machine in its normal operating cycle. In plants where a signal system has been installed, of course, the machinist is notified and can answer calls promptly.

In a plant not equipped with a signal system, the following system will be of interest where similar plant conditions prevail. In the plant of the Pennsylvania *Grit*, one machine is operating full time with Teletypesetter equipment and one other machine about one-third of the time. Thus it will be seen that there isn't enough work to keep a machinist or his helper at the machines all of the time.

In the *Grit* plant, there are two or three hours of work each day at the bench. The bench is located some distance from the Teletypesetter-operated machines. It occurred to Machinist Anthony J. Stanzione that if he knew whether or not the machines were operating normally while he is working at the bench, the worry of breakdown and frequent checking of the machine would be eliminated.

The indicating device itself is described as follows: Mr. Stanzione mounted one of a pair of selsyn motors on a bracket as shown in Fig. 1 so that the rotor is centered on the center line or axis of the main cam shaft of the Linotype, as shown in Fig. 1. The rotor shaft was coupled to the main cam shaft by drilling and tapping an 8-32 hole in the shaft. This selsyn motor is called the transmitter or generator.

The other selsyn motor, which is called the indicator or receiver, was mounted in a box with a clock hand attached to the rotor shaft. A dial was marked off as shown in the instrument in Fig. 2. The indicating part of the hookup was mounted on the bench.

Suitable wiring in a cable (Fig. 1) connects the two motors.

Rotation of the selsyn motor with the cam shaft is 1:1; likewise, rotation of the selsyn motor on the cam shaft and the indicator hand (Fig. 2) is 1:1. Should the machine stop for any reason during its normal operating cycle, the indicator hand also stop.

Since the rotors are connected electrically and are said to operate in space-phase alignment, the indicator hand will show the angular position of the transmitter which in this case is coupled directly to the main cam shaft of the Linotype and therefore shows the position in which the main cam shaft has stopped.

Mr. Stanzione explains that the dial is marked off with the segmental lines by stopping the machine in the three most important positions as indicated in Fig. 2. These are: Vertical line at top center, normal stop of the machine; Segmental line left of top center, overset line (vice automatic stop); Segmental line right of top center, transfer position stop (could be either ejection stall, transfer block, or distributor stop). Now, if the indicator

(*Continued on Page 108*)

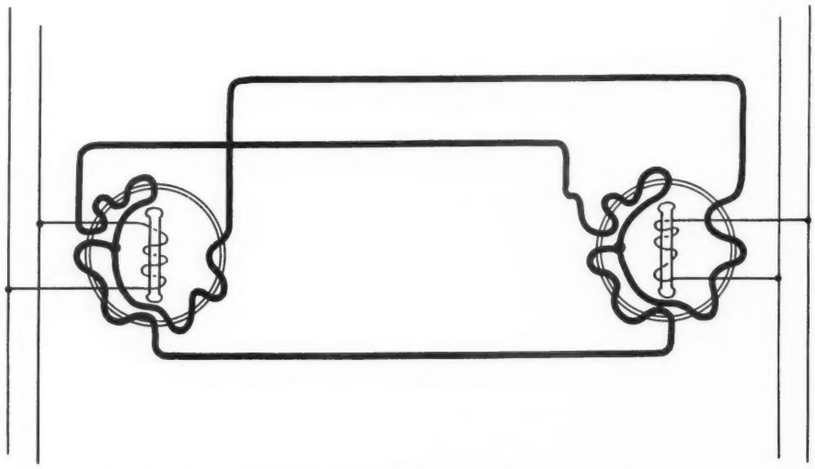
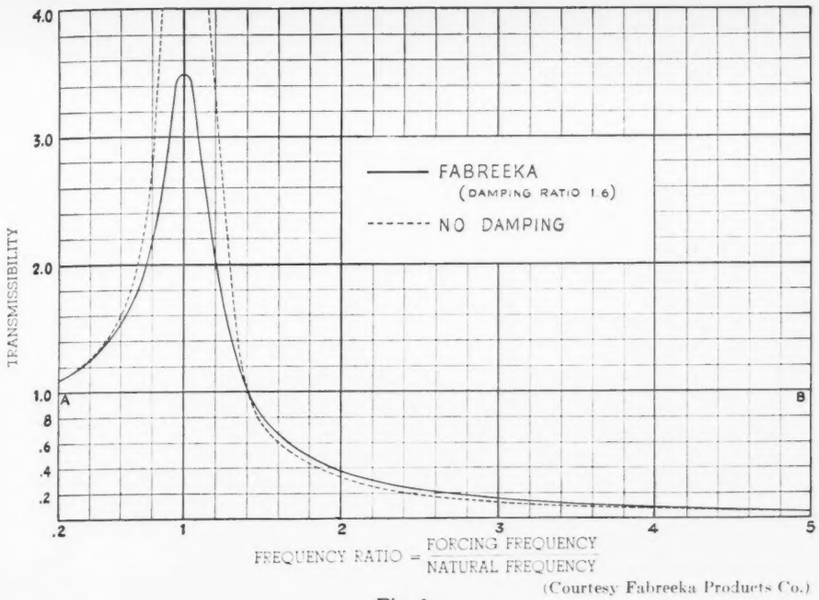


Diagram of Selsyn Set with Interconnected Stator Windings and Rotors Connected to Exciting Source.—Two selsyn devices are shown diagrammatically in the above figure. The transmitter and receiver (indicator) rotors are located at left and right. They are bipolar with shuttle-wound definite poles and exciting windings supplied from a s.ph. a.c. source, usually of a standard frequency, such as 60 cy. Each corresponding stator is provided with a 3 ph. armature winding. These two windings constitute in effect generator and motor armature windings. The receiver may be, and usually is, located remote from the transmitter. Any angular movement imparted to the transmitter rotor (a few degrees or several revolutions) is at once duplicated by the indicator rotor; *i.e.*, the action is self-synchronous, hence the name "selsyn".

The above description of selsyn devices is from *The Standard Handbook for Electrical Engineers*, 8th Ed., edited by A. E. Knowlton. Copyright 1949. Courtesy of McGraw-Hill Book Co., Inc.



(Courtesy Fabreeka Products Co.)

Fig. 1.

Vibration Isolation Is Helpful in Abating Noise in Printing Plants

By FRANCIS A. WESTBROOK*

**Mechanical Engineer, Benson, Vt.*

IN many cases greater success has been had in sound conditioning noisy pressrooms and other printing plant locations by taking measures to isolate the vibration of the machinery than by the installation of sound absorbing materials. Sometimes both methods are used in the treatment of the same space. It all depends on the type of machinery causing the noise, the arrangement of the machines, the kind of flooring and the type and construction of the building.

Improper mounting of the presses and other machines may result in much unnecessary noise. For example, the bolting of high speed equipment to concrete or wood floors is likely to cause the floor to act as a sounding board which will spread the noise even to remote parts of the building. The use of resilient pads for mountings breaks the continuity of vibration between its source in the press, or other high speed machine and the floor and they are usually a great aid in reducing noise.

Due to the development of the new adhesives it is now possible to cement such mountings securely to the floor, whether it is concrete or wood, and to the metal base of the machine. Such resilient pads are on the market in sizes and types suitable for most of the commonly used printing plant machinery, and they often do away with the need of bolting to the floor. This naturally saves time and labor, does not damage the floor surface and makes it easier to move the machinery.

Where bolts are essential the pads may still be used, plus resilient bushings around the bolts and washers of the same material under the nuts. Such an arrangement effectively isolates the machine vibrations from the floor.

Isolating Vibrations

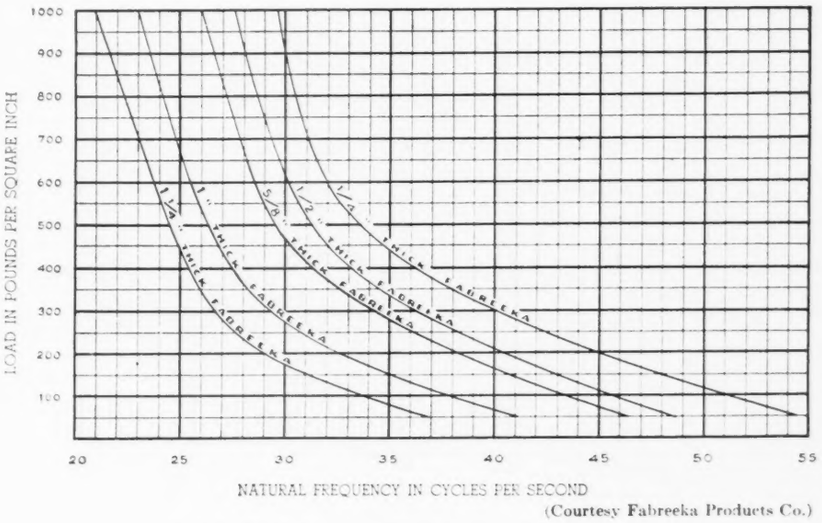
Several points must be taken into consideration when planning the installation of resilient mountings in order to make them effective. In the first place there is a definite difference between the absorption of impact shocks and the reduction of transmitted vibration. Heavy impact loads occur generally at comparatively infrequent intervals, with a frequency that cannot be treated as a wave motion. Resilient pads under the base of a machine subject to impact shocks will always reduce the impact load on the foundation. Easily possible 75% reductions are with properly engineered pads. Pads also have a damping effect, which is the force that resists motion and by thus absorbing energy reduces the shock of the impact to a marked extent. Elastic, or secondary, vibrations of high frequency are always set up when an impact blow takes place, as with a tuning fork, and the pads serve the additional purpose of isolating these vibrations.

Transmitted high frequency vibration can be considered as greater than 100 cycles per sec. set up as wave motions. When transmitted vibration is to be reduced it is necessary to consider the ratio of the natural frequency of the machine to the frequency to be isolated. When a weight is mounted on a spring or resilient material and a force applied to it and then released, it will bounce up and down a definite number of times per second. This is the natural frequency of that particular weight on that specific mounting. A greater weight would have a lower natural frequency and a lesser weight would have a higher natural frequency. Also a more resilient mounting would give a lower natural frequency, and vice versa.

Forcing Frequency

When the weight is a running machine it introduces another frequency which is

(*Continued on Page 94*)



(Courtesy Fabreeka Products Co.)

Fig. 2. Natural frequency vs. loading and thickness.

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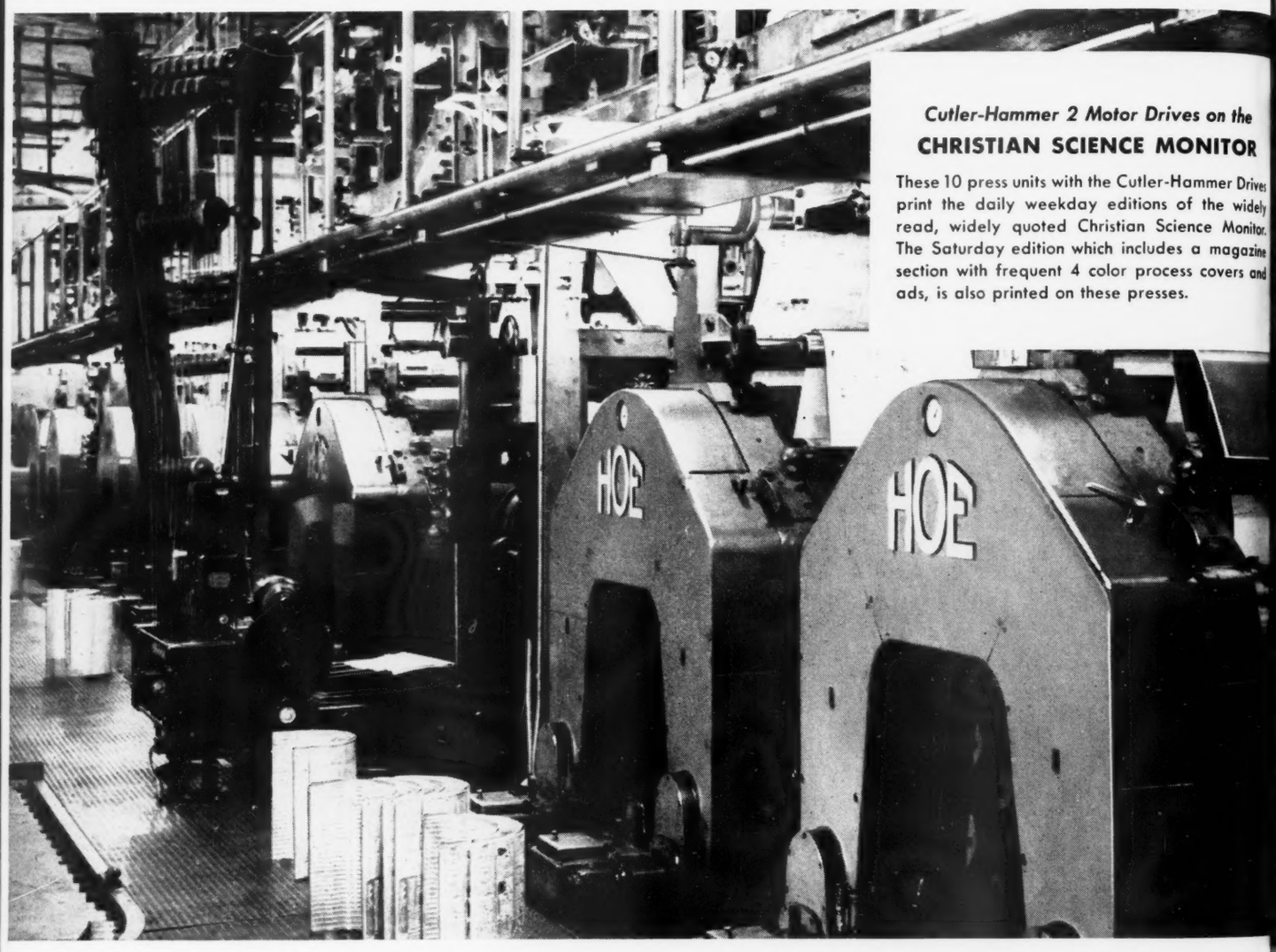

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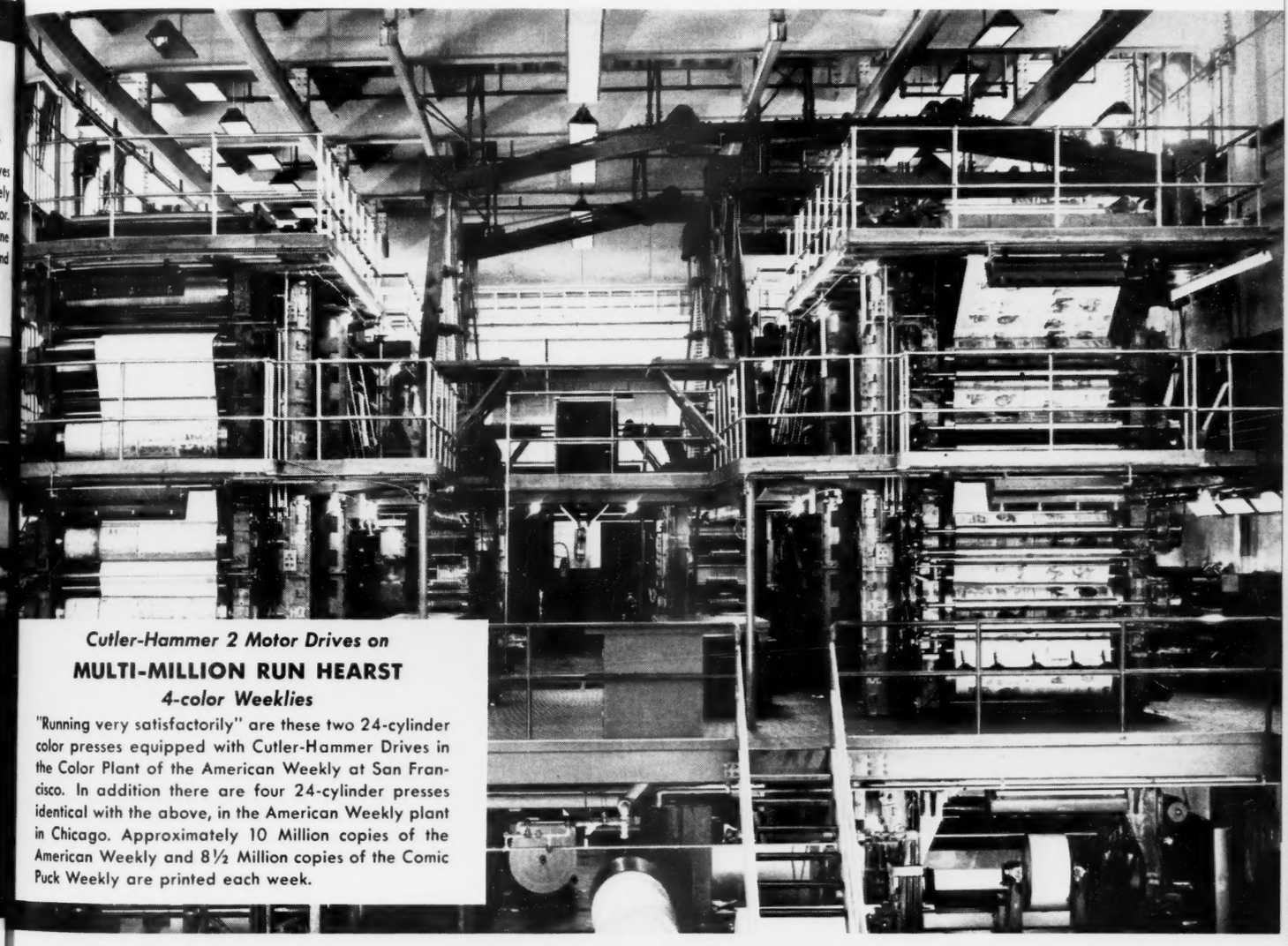

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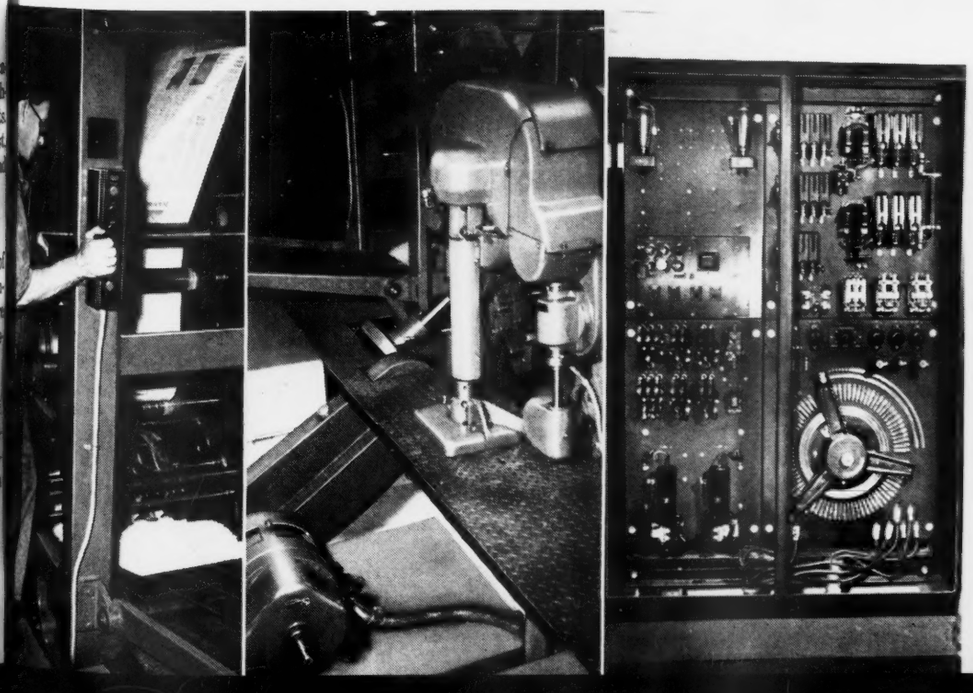

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Cutler-Hammer engineers have developed a safe, practical, modern and dependable electronic single motor drive for tubular type newspaper presses and small magazine presses. Such a drive is now in operation on a Goss Press at Goshen, Indiana, printing the Goshen News Democrat. This drive has proved so successful in utilizing the characteristic advantages of electronics that it is being copied elsewhere.

Conference Dates (*with organization names and principal officers*)

American Photoengravers Association — 1950 Convention to be held at Chalfonte-Haddon Hall Hotels, Atlantic City, N. J., October 9, 10 and 11. W. K. James, President; Frank J. Schreiber, Executive Secretary, 166 W. Van Buren St., Chicago 4, Ill.

ANPA Mechanical Conference—1951 Conference, Edgewater Beach Hotel, Chicago, June 11, 12 and 13. Chairman of the Committee, Edwin H. Evers, Production Manager, St. Louis *Globe-Democrat*. Manager ANPA Mechanical Dept., Vernon R. Spitaleri, 370 Lexington Ave., New York 17, N. Y.

Fifth District Craftsmen's Conference — Secretary-Treasurer, John Fisher, Superintendent, Reardon-Parshall Co., 466 Larned St., N.W., Detroit, Mich.

Great Lakes Newspaper Mechanical Conference—1951 Conference, Hotel Oliver, South Bend, Ind., January 7, 8 and 9. President, LeRoy Coates, Pressroom Supt., Grand Rapids (Mich.) *Press;* Secretary, Al. P. Oberg, Flint (Mich.) *Journal;* Chairman, Mfrs. and Suppliers Committee, Clay Wellman, Ludlow Typograph Co., 2032 Clybourn Ave., Chicago 14, Ill; Local Arrangements Chairman, Royal H. Rager, South Bend (Ind.) *Tribune*.

Illinois Newspaper Mechanical Conference—1950 Conference, Hotel Louis Joliet, Joliet Ill., September 23 and 24. President Arthur Kramer, Joliet (Ill.) *Herald-News;* Secretary-Treasurer, William L. Augspurger, Peoria (Ill.) Newspapers, Inc.

Intl. Assoc. Electrotypers & Stereotypers — 1950 convention to be held aboard the ship Queen of Bermuda and the closing session ashore at the Princess Hotel, Bermuda. Ship departs from New York, N. Y., Saturday, October 28, 3 p.m. Return trip, boat docks in Bermuda on Friday, November 3 at 9 a.m. A. P. Schloegel, Executive Secretary, 701 Leader Bldg., Cleveland 14, Ohio.

International Association of Printing House Craftsmen—1950 Convention to be held at Hotel Stevens, Chicago, September 10, 11, 12 and 13. President, Russell J. Hogan, Wilson H. Lee Co., Orange, Conn.; Executive Secretary, Pearl E. Oldt, 18 E. Fourth St., Cincinnati 2, Ohio.

International Typographic Composition Association—1950 convention, Chicago, Hotel Sheraton, Sept. 14, 15 and 16. President, Frederick H. Lutz, Lutz Composition, 93 Centre St., Brockton 35, Mass.; Frank M. Sherman, Executive Director, 1015 Chestnut St., Philadelphia 7, Pa.

Iowa Daily Newspaper Mechanical Conference — 1951 Conference, Hotel Montrose, Cedar Rapids, Iowa, May 5, 6 and 7. President, L. T. Caldwell, Stereo Supt., Cedar Rapids (Ia.) *Gazette;* Secretary-Treasurer, Paul F. Kamler, Mechanical Supt., Clinton, (Ia.) *Herald*.

Kansas Newspaper Mechanical Conference — 1950 Conference to be held at Kansan Hotel, Topeka, Kan., September 30 and October 1. President, G. M. Harris, Salina (Kan.) *Journal;* Secretary-Treasurer, Larry Miller, 701 Jackson St., Topeka, Kan.

Lithographers National Association — 1950 Convention to be held at Edgewater Beach Hotel, Chicago, September 7, and 8. President, Randolph T. Ode, President, The Providence Lithograph Co., Providence, R. I.; Executive Director, W. Floyd Maxwell, 420 Lexington Ave., New York 17, N. Y.

Missouri Newspaper Mechanical Conference — 1950 Conference, Claridge Hotel, St. Louis, Mo., September 8, 9 and 10. President, Otto Enlow, Photoengraving Dept., Joplin (Mo.) *Globe;* Secretary-Treasurer, O. K. Hammitt, Mechanical Supt., Moberly (Mo.) *Monitor-Index*.

National Association of Litho Clubs — Executive Secretary, William J. O'Holleran, Assistant Supt., Myercord Co., 5339 W. Lake St., Chicago 44, Ill.

National Association of Photo-Lithographers — 1950 Convention to be held at The Shoreham, Washington, D. C., October 25, 26, 27 and 28. Executive Vice President, Walter E. Soderstrom, 317 West 45th St., New York 19, N. Y.; Executive Secretary, William J. Stevens, 317 West 45th St., New York 19, N. Y.

National Graphic Arts Education Association — 1950 convention, Chicago, Sherman Hotel, Sept. 21, 22 and 23. John G. Henderson, President; Fred J. Hartman, Educational Director, 719 Fifteenth St., N. W., Washington 5, D. C.

National Graphic Arts Exposition—International Amphitheatre, Chicago, September 11 to September 23, 1950. Headquarters for National Graphic Arts Exposition, Inc., at Room 802, 105 W. Monroe St., Chicago. President, A. E. Giegengack; Asst. to President, Russell H. Herrell; Secretary, S. Frank Beatty, Graphic Arts Assoc. of Illinois, Chicago. Exposition hall closed on Sunday, Sept. 17. Open all other days from 1 p.m. to 10 p.m.

National Printing Equipment Association, Inc. — Palmer House, Chicago, September 19, 1950. Directors meeting, 10 a.m.; meeting of members, 2 p.m. President, R. Verne Mitchell, Harris-Seybold Co., 4510 E. 71st St., Cleveland 5, O.; James E. Bennet, Secretary, 140 Nassau St., New York 7, N. Y.

New England Mechanical Conference — 1950 Conference to be held at Hotel Statler, Boston, October 28 and 29. President, Arthur M. Kohler, Production Mgr., Waltham (Mass.) *News-Tribune;* Secretary-Treasurer, Walter C. Crighton, Comp. Room Supt., New London (Conn.) *Day*.

Northwest Mechanical Conference — 1951 Conference, Radisson Hotel, Minneapolis, Minn., February 10, 11 and 12. President, Vernon G. Eck, Dunwoody Industrial Institute, Minneapolis, Minn.; Secretary-Treasurer, Ralph Carson, Dunwoody Industrial Institute, Minneapolis, Minn.

Pacific Mechanical Conference —1951 Conference tentatively set for Biltmore Hotel, Los Angeles, during May. President, L. M. Richardson, Mechanical Supt., Los Angeles *Herald-Express;* Secretary for the North, Edw. N. Conley, color press foreman, San Francisco *Chronicle;* Secretary for the South, Fred J. Moyer, Los Angeles *Daily News*.

Pacific Society of Printing House Craftsmen—Secy.-Treas., C. B. Park, 102 N. W. 9th Ave., Portland, Ore.

PNPA-NJPA Joint Mechanical Conference—1951 Conference, Abraham Lincoln Hotel, Reading, Pa., April 6 and 7. Conference director, Theodore A. Serrill, PNPA Manager, Telegraph Bldg., Harrisburg, Pa.

Printing Industry of America — 1950 convention, Chicago, Palmer House, Sept. 17, 18, 19 and 20. James R. Brackett, General Manager, 719 Fifteenth St. N. W., Washington, D. C.

Research and Engineering Council *of the Graphic Arts Industry, Inc.*—President, Frank F. Pfeiffer, Reynolds & Reynolds Co., 800 Germantown Ave., Dayton, O.; Official Headquarters, Bernard Taymans, 719 Fifteenth St., N. W., Washington 5, D. C.

SNPA (Eastern Div.) Mechanical Conference — 1950 Conference, Tutwiler Hotel, Birmingham, Ala., August 28 and 29. Chairman, L. H. Pickens, Mechanical Supt., Greenville (S. C.) *News-Piedmont;* Secretary, Tom Tanner, c/o SNPA, P.O. Box 1569, Chattanooga 1, Tenn.

SNPA (Western Div.) Mechanical Conference—Secretary, C. W. Tabb, 621 Texas Bank Bldg., Dallas, Tex.; Chairman, Manufacturers' and Suppliers' Committee, William Sefton, c/o Howard Flint Ink Co., 1010 Lockwood Dr., Houston 20, Tex.

Technical Association of the Lithographic Industry —(TALI)—President, Michael H. Bruno, Lithographic Technical Foundation, Glessner House, 1800 So. Prairie Ave., Chicago 16, Ill. Secretary-Treasurer, Geo. W. Wilhelm, 814 N. East Ave., Oak Park, Ill.

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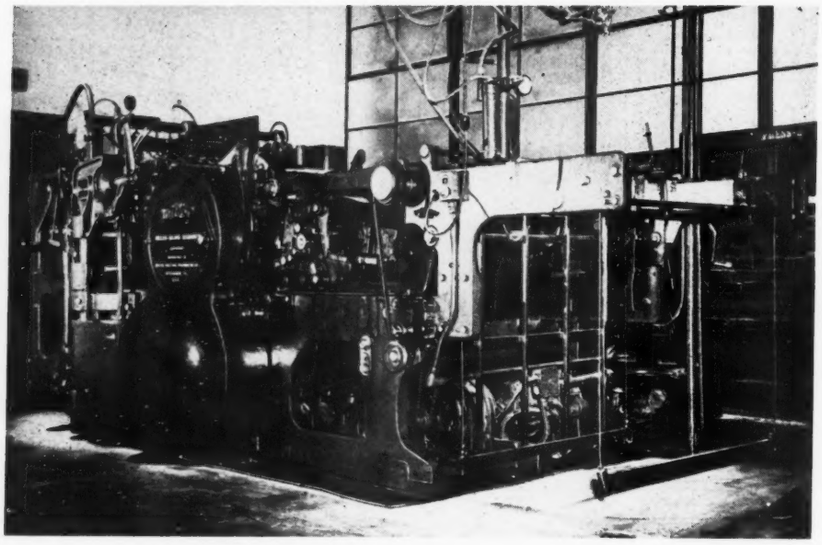

Miller Printing Machinery Co.'s Miller Major Automatic Presses at the Rumford Press, Concord, N. H., are mounted on Felters Company Unisorb Pads. All presses in the new building are mounted in this way. From 60% to 85% of the transmitted noise and vibration are absorbed.

(*Continued from Page 89*)

generally its operating speed, known as the forcing frequency. This is the frequency of the vibration which is to be isolated. If the natural frequency and forcing frequency are the same, resonance exists, in which case the amplitude of the vibration transmitted to the foundation is materially increased, and the situation is much worse than if there were no resilient mounting. Unless the resilient mounting is such that the natural frequency is less than half the forcing frequency it is not possible to have effective isolation. Lack of knowledge of this principle probably accounts for many unsuccessful attempts at isolating vibrations, and effectively reducing transmission.

The ratio of forcing frequency (to be isolated) to the natural frequency is known as the frequency ratio. Transmissibility is the ratio of the transmitted amplitude of vibration to the amplitude of the machine vibration. For perfect isolation this ratio would equal zero, and if it equals one (amplitude of transmitted vibration equals amplitude of machine vibration) the effect is that of not having any resilient mounting, regardless of frequency.

Transmissibility-Frequency

In Fig. 1 is represented the relation between transmissibility and frequency ratio, for resilient mountings made of fabric and rubber (Fabreeka Products Co.). The solid line, A-B, represents transmissibility of one. If resilient mountings are installed and the forcing frequency, or machine speed, is low the frequency ratio is low. The transmissibility can then be greater than if there were no mountings, as shown by the dash line in Fig. 1. By further reference to Fig. 1 it will be seen that when the frequency ratio is 1.414 transmissibility again drops to one, which means that the transmitted vibration is no worse than if there were no resilient mounting.

However, as the frequency ratio increases, that is, as the speed of the machine increases, the transmissibility drops so that at two the transmissibility is .38 and at three it is only .16. This means reductions in transmitted vibration of 62% and 84% respectively. It is important to remember that the amplitude of transmitted vibration will begin to multiply when the frequency ratio passes below 1.414. For a given forcing frequency, or machine speed, the transmitted vibration can be controlled by selecting a resilient mounting which will give a low enough natural frequency to bring the frequency ratio to a point where the desired degree of isolation (low transmissibility) is attained. Of course practical considerations impose limitations but this analysis gives a good idea of what can be accomplished. It furthermore shows that unless resilient mountings are properly engineered they can do more harm than good. In other words, just providing a resilient mounting for a press may or may not be beneficial, and it may be harmful.

Resilient mountings usually have a damping effect on the wave motion of transmitted vibrations which cause them to die out. The ratio of an amplitude of a wave motion to the following amplitude is known as the damping ratio, which will vary for different materials and thicknesses of mountings. For instance if succeeding amplitudes are reduced by one-half through damping the damping ratio is two. The rubber and fabric mounting material referred to in Fig. 1 has a damping ratio of 1.6 and is indicated by the solid curve. The dotted curve is theoretical and does not take damping into consideration.

Frequency Ratio

The natural frequencies of different commercial thicknesses of the rubber and fabric material at loadings from 50 to 1000 pounds per sq. in. are shown as curves in Fig. 2. If the machine vibration, or forcing frequency, is known or can be determined it is then possible to calculate the frequency ratio (which is forcing frequency divided by natural frequency) and then from Fig. 1 to find the transmissibility of the mounting. This, we have seen, is the measure of the transmitted vibration.

Of course, different curves are necessary for different materials, but Figs. 1 and 2, plus the discussion centering around them, show, briefly, the principles involved in the transmission of vibration and vibration isolation.

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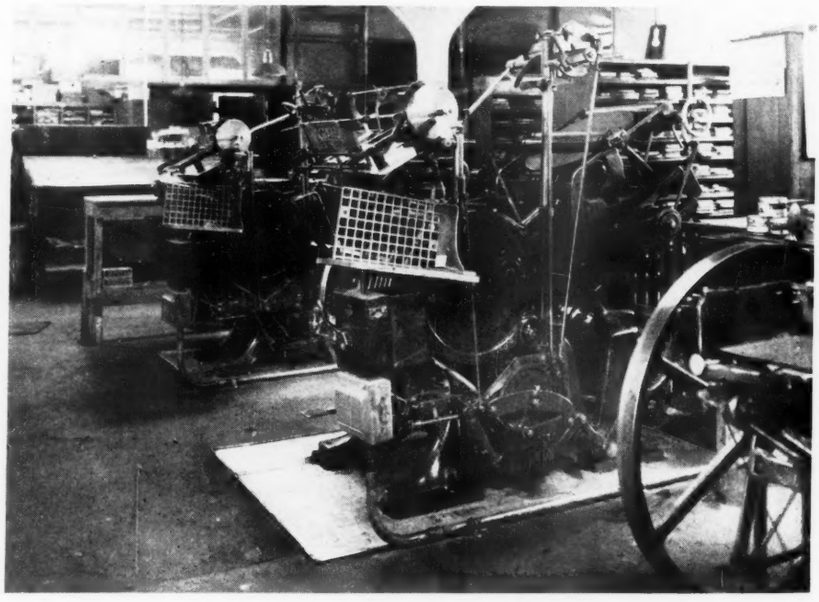


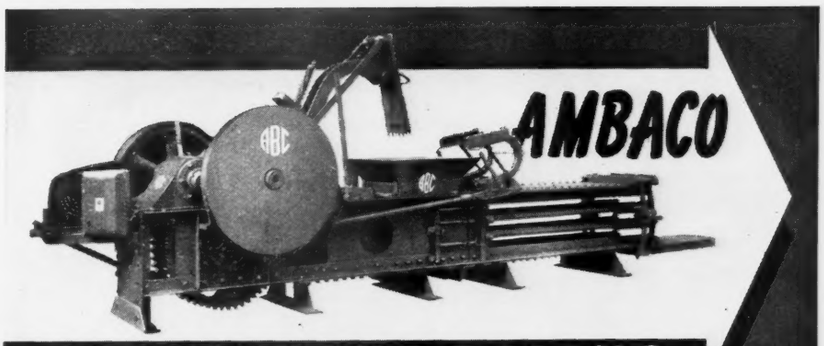
Brandtjen & Kluge, Inc., Kluge Automatic Presses, in sizes 10 in. by 15 in. and 12 in. by 18 in., at the A. T. Howard Co., Boston plant, are mounted on Unisorb Pads. Only the rythmical click of the presses is audible. Other machines in this plant have been similarly mounted.

Will Cooperate

According to Executive Director Wade E. Griswold, the Lithographic Technical Foundation addressed a letter to a number of war agencies recently. In the letter it is explained because of the particular uses to which the lithographic process has been put in the past in U. S. military and naval operations, the Foundation stands ready to cooperate. An invitation is extended to the various war agencies to utilize LTF's manpower and facilities in research, technical and training aspects to help expedite and make more effective the serious emergency job for the country. It is further suggested that each of the war agencies addressed appoint someone from its organization as a member of LTF's Research Committee so that each war agency can keep in close touch with LTF's research work. In this way, LTF might be of assistance in solving some of each of the war agency's problems.

Plant Maintenance Show

The Plant Maintenance Show will be held again at the Auditorium in Cleveland on January 15-18 incl., 1951, according to an announcement by the exposition management, Clapp & Poliak, Inc., 341 Madison Ave., New York 17, N. Y. Already, 120 companies have leased booth space. Advance registration cards and hotel information may be obtained from Clapp & Poliak, Inc.



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Patents

For The GRAPHIC ARTS

Covering patents issued July 4, July 11, July 18, and July 25.

All new patents for the Graphic Arts are reported exclusively for Printing Equipment Engineer by Invention, Inc., an industrial patent research organization in Washington, D. C. Invention, Inc., presently has the only staff in the country that examines, in the U. S. Patent Office, the complete printed copy, drawing by drawing and page by page, every one of the several hundred new patents issued each week. Printing Equipment Engineer is the only trade publication in its field offering a report based on this complete coverage. For copies of the patents listed here specify the patent numbers and send 25c for each separate patent, or 10c for each trade mark or design patent (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

Binding, Cutting, Perforation

2,513,276. BOOK-STITCHING MACHINE includes a saddle along which signatures to be stitched, and stitched books, are movable. The saddle comprises front and back plates defining an inverted V with the included angle less than 90 degrees. The front and back plates are convexly curved between their upper and lower edges, and the lower portions of the plates are flat and perpendicular, so that in side view the saddle somewhat resembles a Gothic arch. Books drop naturally upon the saddle with uniform unit pressure throughout the entire area of contact between book and saddle. Invented by Elmer W. Belluche, Racine, Wis. Assigned to The Christensen Machine Co., Racine, Wis. Application August 3, 1949. 7 claims.

2,516,446. METHOD OF BOOKBINDING is continuous rather than intermittent and does not subject the binding edges to the severe stresses of prior processes. The apparatus comprises a conveyor for securing and conveying a succession of page-blocks, at least two power-driven rollers mounted on shafts with their axes at acute angles to the direction of travel of the conveyor and means for driving the rollers in the same direction as the travel of the page-blocks and at a peripheral speed greater than the speed of travel of the page-blocks while in contact with the binding edges of the page-blocks. One roller is set to flare the pages on one side of the center outwardly and the other roller is set to flare the pages on the opposite side outwardly. Invented by Edgar L. Budden, Richmond Hill, N. Y. Assigned, by mesne assignments, to De Florez Engineering Co., Inc., a corporation of Connecticut. Application July 29, 1947. 5 claims.

2,516,460. BINDING OF BOOKS. Invention relates to the rounding operation in forming the joint and aims to flare out page ends uniformly in both directions from center line of the binding edge. The device comprises a rounding member having a resilient deformable binding-edge-engaging face, a central part of the face being adapted to engage the central leaves of the binding edge and two outside parts of the face being adapted to engage the outer leaves. The central part is more resilient and deformable than the outer parts. The rounding member is properly supported and mechanism is provided for pressing the deformable face parts into contact with the binding edge to concavely deform the face and correspondingly to convexly deform the binding edges. Invented by Edward M. Getzoff, Red Bank, N. J. Assigned, by mesne assignments, to De Florez Engineering Co., Inc., a corporation of Connecticut. Application June 3, 1947. 4 claims.

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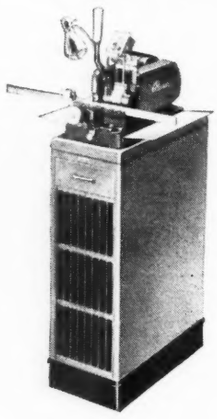

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Composing Room Equipment

During the four weeks covered by this report, no patents have been issued for this heading.

Feeding, Folding, Delivery

2,514,737. COUPLING MEANS FOR FOLDING ROLLS can be quickly adjusted for different roll spacings, corresponding to different thicknesses of paper being folded, without disturbing the rolls and their bearings or requiring any disassembly of the machine. A plurality of gear sets are permanently associated with the rolls and arranged so that only one gear set at a time may be rendered operative to drivingly couple the rolls. Invented by Ivan G. Anderson, Chicago, Illinois. Unassigned. Application April 8, 1948. 1 claim.

Miscellaneous

2,513,433. ELEVATOR FOR RAISING WORKPIECES is usable in raising stacks of paper to the table of a die or cutting press. It is operated with a small motor so that when operator takes off one lift of paper the elevator

automatically raises the next lift to proper height. The elevator is automatically stopped when stacks of sheets reach desired level. This level may be adjusted to the requirements of tall or short operators. Invented by Ross E. Skow, Kansas City, Mo. Assigned to Baltimore Paper Company, Kansas City, Mo. Application August 6, 1947. 12 claims.

Plate Making

2,516,222. GRAINING OF LITHOGRAPHIC AND OTHER PRINTING PLATES, as well as plastic sheets used in the art of offset printing, is accomplished by mounting the work to be grained on a rotatable drum and rotating the drum at a peripheral speed of at least about 25 inches per second. A high-velocity blast of grinding sand is directed against the work at an angle of incidence within the range of 45-90 degrees and under a nozzle pressure of 15-70 pounds per square inch, while moving the blast longitudinally at a slow constant speed along the drum. Invented by Johan Gunnar Lindmark, Stockholm, Sweden. Assigned to Aktiebolaget, Johnson & Borsell, Stockholm, Sweden. Application April 13, 1949; in Sweden January 26, 1945. 4 claims.

Printing Inks

During the four weeks covered by this report, no patents have been issued for this heading.

Printing Presses and Equipment

2,513,643. ATTACHMENT FOR NEWSPAPER PRESS INKING ROLLER SHAFTS is adapted for the removable support of rollers from a press without straining bearing assemblies for the rollers. A roller shaft is narrowed at one end for extending within the socket of a split clamp, and its hub diameter is larger near the body of the inking roller. A stepped collar is between the narrow end and the hub and is of larger diameter than shaft end. A sleeve encases the narrowed end extension and is engageable by the split clamp. The bore of the sleeve is outwardly tapered and of slightly greater diameter than the end extension and at its inner end has an enlarged shoulder abutting the inner face of the clamp. The shoulder carries an anti-friction bearing which is mounted on the stepped collar. Thus roller shaft is journaled in the bearing on the collar and relative axial movement of the shaft and sleeve is limited by the spacing between the end extension and encasing sleeve part. Invented by Leslie J. Griner, Detroit, Mich. Assigned to Alico, Inc., West Springfield, Mass. Application June 4, 1949. 2 claims.

2,514,556. INK FOUNTAIN STRUCTURE. Fountain roller is journalled in side walls. A pivoted bottom wall has a closed and an open position with respect to the fountain roller. Toggle mechanism for actuating the bottom wall includes a pair of links at each end of the bottom wall and an eccentric pivotally connecting the links of one pair. This provides for the adjustment of the pivot center of the links of the one pair to insure proper positioning of the bottom wall with respect to the fountain roller in its closed position. Toggle mechanism is driven by a worm gear. Invented by Henri E. Peyrebrune, River Forest, and Harry T. James, Chicago, Ill. Assigned, by mesne assignments, to Miehle Printing Press & Manufacturing Co., Chicago, Ill. Application March 11, 1947. 7 claims.

2,514,653. INK FOUNTAIN DIVIDER not only prevents inks of different colors from running together in the fountain but also treats the fountain roller so that inks deposited thereon will not run together during transfer. The divider is provided with a reservoir for ink separating fluid and the reservoir is connected with the fountain roller engaging pad. Flow of fluid to the pad is controlled by a needle valve so that a light film of the fluid is deposited on the roller. A spring-biased plate carried by the divider urges lower end of pad into constant contact with the surface of the roller. Invented by Stephen A. Lerch, Milwaukee, Wis. Unassigned. Application May 2, 1949. 6 claims.

2,515,355. PERFECTING OFFSET PRESS. The sheet fed perfecting offset press includes two printing units each comprising plate and blanket cylinders of the same size in vertical alignment and and impression cylinder of double size. The impression cylinder of each unit is disposed below the axis of the blanket cylinder on the side thereof toward the other unit. The impression cylinders of both units have two sets of sheet grippers. Impression cylinders and their grippers are so disposed that the grippers of the first unit impression

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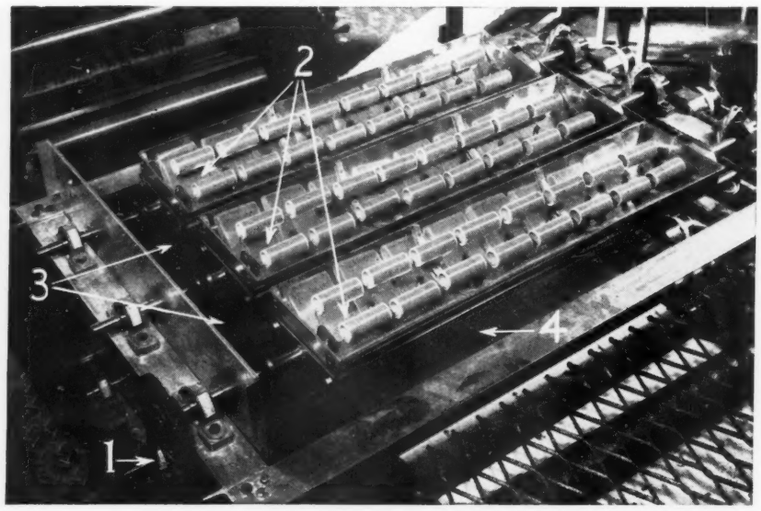
cylinder transfer sheets directly to the grippers of the second unit compression cylinder. Invented by Howard A. Pritchard, Hiram, Ohio. Assigned to Harris-Seybold Co., Cleveland, Ohio. Application July 13, 1945. 4 claims.

2,516,408. PLATE CLAMPING MECHANISM for printing presses is well suited for securing curved stereotype and other curved plates to rotary cylinders. Such cylinder has spaced T-shaped slots which extend longitudinally or axially, and longitudinally spaced pairs of curved clips that extend around the cylinder so as to firmly hold the plates against the cylinder. The clips carry clamping blocks which are arranged so that two clamping blocks are connected or joined together by a clip. The blocks are slidable in the longitudinal slots of the cylinder. Invented by Alfred Neef, Audubon, N. J. Unassigned. Application June 10, 1948. 3 claims.

2,516,757. DAMPENING FOUNTAIN FOR PRINTING PRESSES. Dampening units are adapted to be associated with offset printing presses mounted on unsteady platforms, such as decks of ships, with the dampening units being so constructed that the moistening solution is retained in dampening fountains which are almost completely enclosed. Dampening units may be subjected to considerable tilting in different directions without the moistening solution being spilled or splashed out of the fountains. Invented by William Ward Davidson, Evanston, Ill., and Edward F. Dell, Chicago, Ill. Assigned to Davidson Manufacturing Corp., Chicago, Ill. Application June 23, 1947. 3 claims.



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this New Doyle Automatic Dryer

Now you can have all of the advantages of Doyle infrared radiant heat for high-speed drying on web and sheet fed rotary presses, with completely automatic controls.

Illustration shows eight-color web offset perfecting press, with one bank of Doyle heating elements above the web and a second bank below.

When motor drive stop button is depressed, heater assemblies on both sides of web automatically turn off and move away from web 4, as shown, by means of a gear reduction motor tied in with press drive. Gear reduction motor is indicated at 1. Heater assemblies, 2, are mounted on individual ball bearings and are driven in unison by sprocket wheel and chain connection 3.

If you are unable to attend the Exposition, write for complete descriptive bulletin to J. E. Doyle Company, 1220 West 6th St., Cleveland 13, Ohio.

Booth No.

GRAPHIC ARTS 177 EXPOSITION

EXECUTIVE Cs

Frederick B. Heitkamp, named Director of ATF Incorporated. Mr. Heitkamp, formerly with American Type Founders Sales Corp., has been a vice president of the company since 1946. He is a graduate of Rutgers University.

The appointment of Alvin F. Friedrich as Vice President and Midwest Sales Manager of the Process Color Plate Co. of Chicago, was announced recently by Gradie Oakes, President of the company. Mr. Friedrich's territory will include Indiana, Michigan, Ohio, Kentucky and parts of Illinois and Pennsylvania. He is Fifth District Representative of the International Assoc. of Printing House Craftsmen and First Vice President of the Indianapolis Craftsmen's Club. He is also Secretary-Treasurer of the Indianapolis Advertising Club.

George C. Obermeier, added to the sales and service staff of the Lanston Monotype Machine Co., according to an announcement by A. E. Giegengack, Executive Vice President. Mr. Obermeier was previously associated with a St. Louis printing plant as night foreman of the Monotype department. He is a veteran of World War II.

Luis Flores, Vice President of Fuchs and Lang de Mexico, S.A. de C.V., recently visited Fuchs & Lang's headquarters in Long Island City, N. Y. Mr. Flores studied quality control methods and procedures during his visit.

Directors of the Howard Flint Ink Co. have named Edgar B. Flint as President, and Robert H. Flint as Vice President of the company and also President of the Flint Chemical Co., a subsidiary of the firm. E. B. Flint, a graduate of Babson Institute of Business Administration, has been associated with the company 17 years. R. H. Flint has been active with the firm 16 years, a graduate of Amherst University and a veteran of World War II. Howard Flint, who founded the company in 1920, now becomes Chairman of the Board of Directors.

Edgar B. Flint, named President of the Howard Flint Ink Co.

Robert H. Flint, named Vice President of the Howard Flint Ink Co. and President of the Flint Chemical Co.

Fred W. Seybold, Chief Designer and Engineer of the E. P. Lawson Co., was honored recently on the occasion of his fifth anniversary with the company. Mr. Seybold was presented with a gold wrist watch by David W. Schulkind, Lawson's president.

Charles T. Sykes, appointed New England area Factory Representative for Nolan Corporation, according to Edward J. Nolan, President of the firm.

H. A. Longstaff has been appointed Chief Chemist in New England for the Geo. H. Morrill Co., Div. of Sun Chemical Corp., according to an announcement made by Ralph C. Persons, General Manager of the company. Mr. Longstaff formerly served with the Eagle Printing Ink Co. and Sigmund Ullman Co., both divisions of Sun Chemical Corp.

BOOKS
RECEIVED

Materials Handling with Industrial Trucks

HANDBOOK of Material Handling with Industrial Trucks is a 72 page, guide for the analysis of material handling operations and the application of the unit-load method with power-operated industrial trucks and accessories.

This text, illustrations, charts and diagrams, together with engineering data, supplants the former *Materials-Handling Handbook*, which ran through six editions and which was regarded as an authority on material handling practices employing industrial trucks.

Divided into four sections, the Handbook of Material Handling with Industrial Trucks contains: (1) The Evaluation of Industrial Truck Handling; (2) Material Handling Management, with subsections devoted to the preparation and use of flow process charts, handling operations in production, handling in storage, the use of unit loads in storage, with layouts, commodity and capacity factors, etc.; (3) The Organization of an Industrial Truck System and (4) Practical Truck Engineering.

In sections of the book are described

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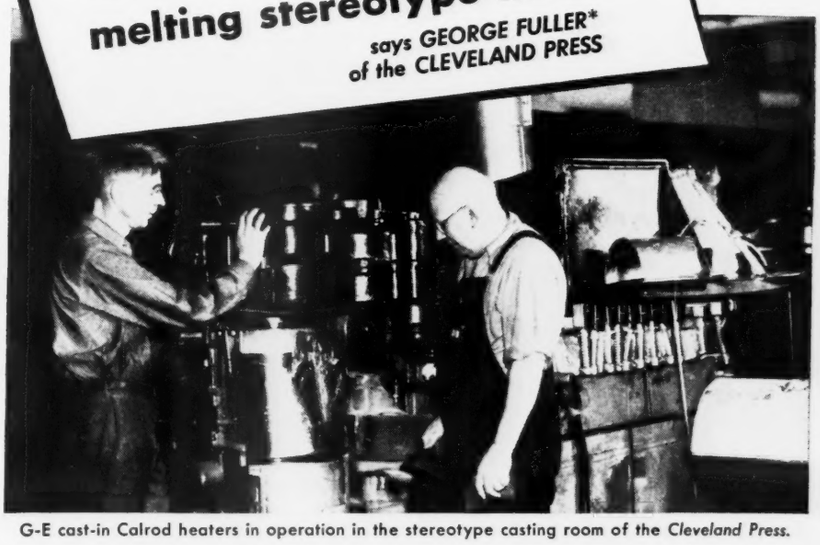

G-E cast-in Calrod heaters in operation in the stereotype casting room of the *Cleveland Press*.

"For actual stereotype operation, you can't beat electric heat. Heat is always available in the intensity you need with the automatic controls that keep the heat range within five degrees of casting temperature. Maintenance problems are reduced to a routine monthly check. Since 1929, we have replaced only six heating units out of 40 installed on our furnaces."

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*Veteran of 42 years newspaper experience and advisor on stereotype operations in the Scripps-Howard syndicate.

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GENERAL ELECTRIC

720-27

the different types of industrial trucks in use; their integration of operation with other material handling systems; unit load determinations and patterns; how to charge and to change storage batteries; how to keep battery records; how to measure handling costs; routing and dispatching methods, and how to train industrial truck operators.

Different types of skids, pallets and other load carriers are illustrated and described, while the book also contains pictures showing actual applications of industrial trucks in handling and storage operations in practically every kind of industry, including the paper and printing industries.

Single copies of the book are sold for $1, with special quantity prices on application. Executive officials of any industry or business, making application on company letterhead to The Electric Industrial Truck Assoc., Dept. PR, 3701 N. Broad St., Philadelphia 40, Pa., will be supplied a copy of the *Handbook* with the compliments of EITA. This same offer of a courtesy copy is extended to deans and professors of engineering colleges and universities.

Engineering Handbook

Plant Engineering Handbook, a 1955 page compendium of industrial know-how which has, until now, appeared only in specialized reference works, was published in August by the McGraw-Hill Book Co., 327 West 42nd St., New York, 18, N. Y. This handbook tells how to manage, operate and maintain industrial plants, and presents the essentials of good plant engineering practices in 77 major areas of plant operation and maintenance.

William Staniar, Editor-in-chief, and the 86 contributing authors, have worked for five years to complete this handbook. It is designed to meet the needs of plant managers, plant superintendents, plant engineers and plant maintenance engineers—the men who are responsible for efficient and economical operations and production in industrial manufacturing plants.

Each of the 77 subjects is an individual treatise on the principles observed by the country's leading manufacturing enterprises and on the methods these companies find most effective. The tables, formulas and graphs accompanying each subject provide further reference.

The book is organized in 35 sections some of which headed as follows: Industrial-Plant Fire Prevention and Protection; Fundamentals of Good Plant Maintenance; Power Plants; Refrigeration; Industrial Instrumentation and Control; Welding; Industrial-Plant Power Distribution and Lighting; Antifriction Bearings; Electrical Speed Control; Lubrication; Materials Handling; Industrial Process Air Conditioning; Pneumatic Conveying, Dust Control and Fume Exhaust; Metallurgy and Corrosion; Physics in the Industries; Vibration Control and Noise Silencing; Plastics, and many others.

Plant Engineering Handbook—William Staniar, Editor-in-chief; 1955 pages; 1487 illustrations; 544 tables. Price: $15. For further information, write the Book Information Service, McGraw-Hill, 327 W. 42nd St., New York 18, N. Y.

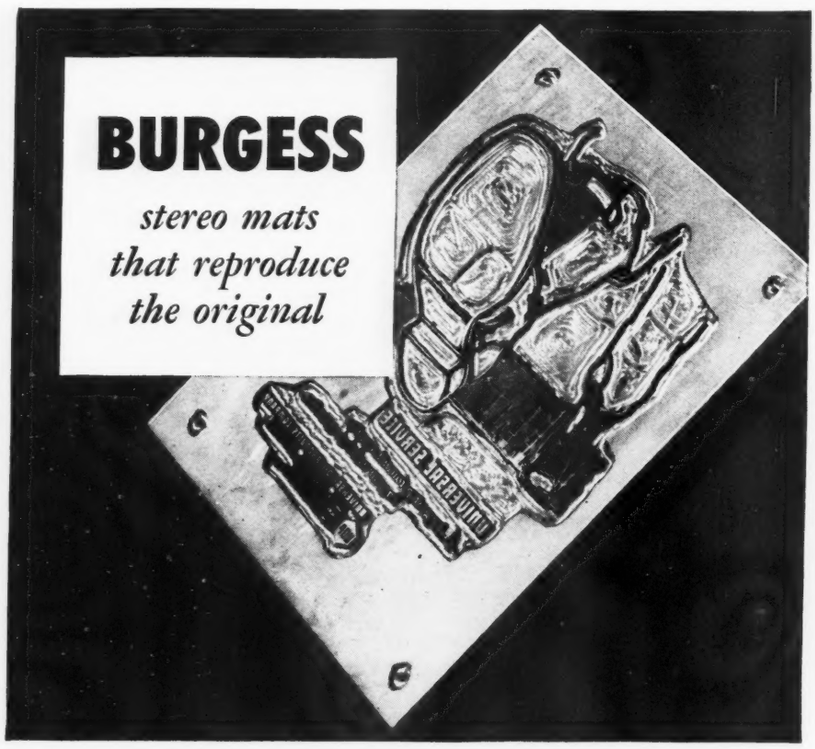
College Standard Dictionary

FUNK & Wagnalls' new *College Standard Dictionary* contains 145 thousand entries and features Emphatype, a method of indicating pronunciation of a word. The Emphatype method underlines the accented part of the word to aid the reader in its pronunciation.

Other features of the dictionary include 1000 pictures placed with the entries they illustrate; one alphabetical arrangement with current, most frequently used definitions given first; and inclusion of synonyms, antonyms, etymologies, derivations, parts of speech and biographical data. Its content includes the plan of the dictionary, an explanation of pronunciation, normal interpretation of English spelling, foreign sounds and special explanatory notes.

Populations of places within the United States, Canada and foreign countries, and abbreviations commonly in use are listed in the appendices. Besides being a book of words, this dictionary will also serve the user as a history book, science text, a geography, nature study manual and a book about people.

College Standard Dictionary—Contains 1404 pages plus 16 pages of contents, 145 thousand entries, 5000 new words and



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The Witch of Ramoth and Other Tales

IF THERE is such a thing as perfection, it has been achieved in the design and production of *The Witch of Ramoth and Other Tales*, by Mark Van Doren. The book has just been published by The Maple Press, York, Pa., and is the eighth annual keepsake volume created for Maple Press by Howard N. King, its Vice President.

Appraising the book only from the standpoint of craftsmanship, we think there's that warm, friendly feeling on the part of the recipient when he first withdraws this unusually designed book from its slide case. Another important point, happily, is that all of the type pages seem to be alike in color; we regard this as an achievement in craftsmanship. Also, most happily, the chapter endings break just right so there is enough type on the final page of each chapter to make it have a non-mechanical appearance. We regard the makeup of *The Witch of Ramoth and Other Tales* superior to King's two best previous books—*The Nine Capitals of the United States* and *The History and Customs of the Amish People*.

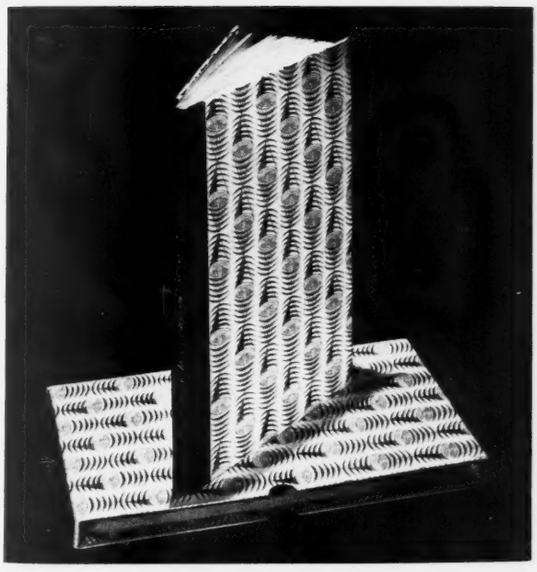
The book consists of 112 pages, $7\frac{3}{8}$ in. by 11 in. The type page size is 28 picas by 44 picas, set in 14 pt. Goudy Village, leaded 4 pts. and printed on Curtis White Wove Rag paper.

Fritz Eichenberg executed the pen and ink illustrations for the nine stories. To bring out and maintain the fine lines in the drawings, both letterpress and offset were used. Each black illustration is printed over a soft tint of irregular shape. A different pastel tint was used to add further attractiveness to each illustration. One of the features is the spot-lighting effect in each illustration. The tint has been printed to provide a halo effect (*i.e.*, no tint in the proper place) to bring out the important feature of each picture.

The book, aside from the type matter, of course, has been printed in 11 different colors, Mr. King having employed rose for the large Weiss initials at the beginning of each chapter, for the two title lines on the title page, and for Maple Press's insignia on the final leaf.

Perhaps the friendliness of the book becomes immediately evident when one sees the slip case and the cover of the book itself. An English handmade paper with a swirling spiral design printed in brown ink has been pasted to the cover boards and over the slip case. The spine (is that the right term?) consists of dark brown cloth with title stamped in gold. The three page sides of the book are edge gilded.

As a book designer, King must have "arrived" some time ago. We're glad to own a copy of *The Witch of Ramoth and Other Tales*—it's worth a permanent place in our small library.



The Witch of Ramoth and Other Tales is the eighth annual keepsake volume created for Maple Press by Howard N. King.

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Predicts Bright Future

In a recent meeting of E. B. Co's production and sales departments, Harold W. Gegenheimer, Div. Mgr., Printing Machinery Div., The Electric Boat Co., pointed out developments and prospects for the offset press based on close observation of its growth during the past ten years.

Within the past ten years both large and small offset presses have increased the number of impressions they can make from between 1000 to 2500 per hour. These advances have been made possible by smaller cylinder diameters which permit comparatively low surface speeds although the presses run faster.

In discussing improved quality, Mr. Gegenheimer gave credit to the manufacturers of inks, rollers, paper, blankets and plates in addition to the press builders themselves.

"Ease of operation has been improved in these days of automatic automobile gear shifts and self-service laundries. Motorized pile lifts are expected and obtainable," he added.

Mr. Gegenheimer said: "The use of anti-friction bearings seems to be the answer to trouble-free bearing operation. Most ballbearing manufacturers now provide grease filled and sealed units with enough lubrication to last for the life of the bearing. Today's press is easier to take apart and service. Entire units can be removed and repaired where there is ample elbow room.

"I believe that the next ten years will bring more improvements with even greater emphasis on ease of operation and speed of makeready. In addition, I am sure we can look forward to an expansion and simplification of multicolor printing".

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14½ x 22 N.S. C&P Hand Feed Press

CUTTING & CREASING

10 x 15 Colts Armory with inking attachment
14 x 22 Victoria Press with double fly wheels
20 x 30 Thompson Die-cutting Press
35 x 48 Babcock Drum Cylinder Press
37 x 52 Babcock Cylinder for heavy board

CYLINDER PRESSES

Style B Kelly, hand feed
V-36 Miehle Vertical
Kelly B. Special, with Extension Delivery
26 x 32 Babcock Optimus Hand Feed, Jogger Del.
24 x 35 Kelly No. 2 Automatic Press
26 x 40 Babcock Optimus Press No. 43
27 x 40 Miller Major Simplex Automatic
31 x 45½ No. 3 Miehle Automatic Press
38 x 52½ No. 1 Miehle for newspaper work
41½ x 55½ No. 2/0 Miehle, Swart Feed, Ext. Del.

OFFSET PRESSES

10 x 14 Multilith Model 296, Suction Feed
10 x 14 Multilith Model 1250, Suction Feed
11 x 17 Multilith Model 1327, Suction Feed
28 x 42 Harris Model S8L with Extension Delivery
38 x 52 Miehle Offset. (2 available)
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Color and Form

Are you color dominant or form dominant? In other words, when you go out to buy things—automobiles, wallpaper, furniture—are you influenced chiefly by their colors or by their shapes? Such questions as these have been answered by the Color Research Laboratory of the Sun Chemical Corp.

A small child when asked to match a red circle against an assortment of green circles and red triangles will not hesitate to put the same colors together, *regardless of form*. To adults, however, the above problem would be considered ambiguous. The chances are that the circles would be separated from the triangles, *regardless of color*.

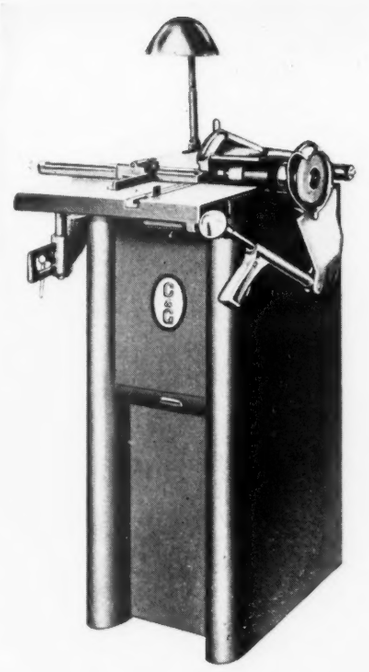
It seems that color in its appeal and influence is a more primitive element than form. Surely in printing and advertising design, nothing "catches" the eye like a brilliant hue. Color attracts in an impulsive way; form is more a debatable thing and needs a bit of training and appreciation to enjoy.

Kodak Production Adequate

In a recent letter to its customers, Eastman Kodak Co. stated that the present rate of Kodak production of photographic materials is at an all-time high. It continued, that unless the demands of a wartime emergency increase substantially, the company believes that the present production rate should be adequate for all its customers if purchases are based on actual needs. During World War II, Eastman found rationing essential to a fair distribution, but doesn't believe it is necessary at this time. However, the company adds, rationing will be used if excessive orders make a fair distribution impossible.

ATF Annual Report

ATF Incorporated has issued a 24 page, cartoon style annual report to employees designed to give an account of operations and earnings during the fiscal year ended March 31, 1950. In addition to the report, the company enclosed a set of eight iced beverage coasters imprinted in two colors with a pie-chart breakdown of the company's income dollar.



Morrison Saw Trimmer—The Morrison Model 45 Special Saw Trimmer available in either bench or floor models, has been announced by the Morrison Company, 125 W. Melvina St., Milwaukee 12, Wis. Features of the machine include a behind-the-gauge work clamp on the standard models and a translucent plastic saw guard. According to the sponsor, elevation of the saw arbor on the Model 45 from trimming position to plate cutting position is almost instantaneous. An ahead-of-the-gauge work clamp is available as optional equipment.

Seybold Continuous Trimmer

INFORMATION on the Seybold Continuous Trimmer with Conveyor Feeder is contained in an illustrated folder released by the Harris-Seybold Co., 4510 E. 71st St., Cleveland 5, O. Separate pages in an inside pocket of the $8\frac{1}{2}$ in. by 11 in. file-sized folder describe the Seybold book and magazine trimming machine. The pages carry detailed photographs, diagramatic drawings, production comparisons, floor plans and specifications. Feature of the machine is the clamping action. Each pile is clamped once, and stays clamped under constant pressure until all three cuts have been made. The trimmer will handle a maximum of 28 piles per min.

1950 Nolan Catalog

EQUIPMENT for use in the printing plant is illustrated and described in the 1950 catalog issued recently by Nolan Corporation, Rome, N. Y. Such items as stereotype flat casting boxes, saw-trimmers, stereosaws, routers, planers, proof presses, miterer, cabinets, trucks, imposing surfaces, remelting furnaces, and other accessories are included in the 40 page catalog. The features of each equipment item are well described in the catalog and the specifications listed.

Slitting On Cylinder Press

WHILE millions of sheets are slitted in some shops regularly, others seem to have lost sight of this economy in paper cutting which allows folding to register and releases the paper cutting machine for other work. Perhaps some shops have tried slitting and failed to get the production anticipated.

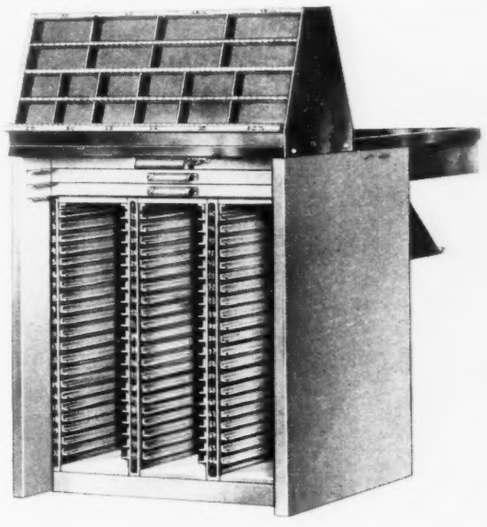
In slitting as in many other operations, items of equipment and supplies in the printing industry, it is necessary to operate from a rectangular base. The center or other margin(s) to be slit must be at an exact right angle with the front edge of the cylinder and the gripper bite must be straight, otherwise satisfactory slitting is not possible.

The shaft carrying the bottom wheels must be true and must not wobble. The driving rubbers must be uniform in thickness and in good condition, set uniformly light to the wheel beneath.

In setting the wheels to slit, the bottom wheel that comes against the straight side should be set where the slit is to be made. Next the slitter wheel is lowered and moved so that the flat side of its blade is snug against this bottom wheel after which the other bottom wheel is moved almost into contact with the slitter blade.

If none of the shafts is out of true, cutting should be satisfactory and rectangularity outlined above will assure register in folding.

Galley Unit for Replacing Type Cases—In the accompanying illustration is shown a newspaper style single-tier type cabinet. Twenty of the type cases which are no longer needed in the ad alley have been removed, leaving the top two type cases in the cabinet. In place of the type cases has been inserted a three-tier galley unit, developed by Hamilton Mfg. Co., Two Rivers, Wis. This galley unit also may be used in other single-tier type cabinet bodies Nos. 12196 and 12197. Capacity of the galley unit is 66 size $8\frac{3}{4}$ in. by 13 in. galleys.



Jacques Power Shear

UP TO 70 cuts per min. of paper, paperboard, foils, plastics, laminations, rubber, pile fabrics and other similar materials, can be made with the Jacques Power Shear, according to the Hobbs Mfg. Co., 46 Salisbury St., Worcester 5, Mass. Material can be either sheet fed or fed directly from the roll. The cutting head of the machine can be mounted directly into a production line or a part of a continuous process, or as a finishing trimmer.

Cutter head can be actuated by a hand or foot switch, or controlled automatically by feed-roll actuator, photo-electric cell or mechanical ticklers. The power shear is made with a 50 in. cut. An automatic clamp and safety is mounted to the rear of the upper blade and moves down automatically ahead of the blade to hold material securely during the cut.

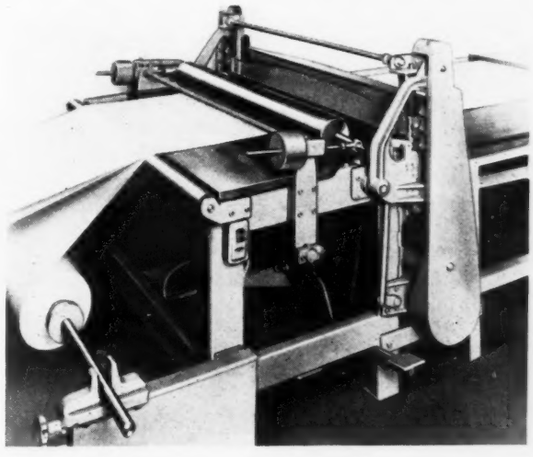


Illustration shows the cutting section of the Jacques Semi-Automatic Power Shear announced by Hobbs Mfg. Co.

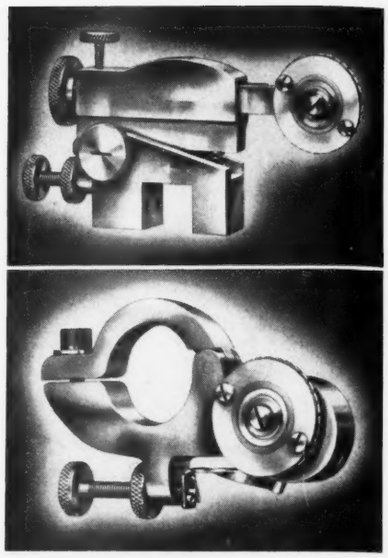
Hamilton School

A three-day conference was held in Two Rivers, Wis., by Hamilton Mfg. Co., on July 20, 21 and 22. The sales conference was held under the direction of Ray C. Cook, Sales Director of Hamilton's Printers' Equipment Div. Dealers and dealer salesmen to the number of 110 came from all parts of the U. S. and Canada. The visiting men were divided into six instructional groups and study-clinic schedules were arranged so that each group attended three sales clinics on Thursday and Friday mornings to cover various phases of the Hamilton line and associated sales problems. A general conference was held Saturday morning, July 22. Suitable entertainment and lunches were provided including music by the 48 piece Hamilton band. A car ferry cruise on Lake Michigan with buffet luncheon was held Friday evening on Lake Michigan.

Bandless Press Perforator

THE Preferred Bandless Perforator, it is claimed by Preferred Pressroom Products Co., Box 944, Lynn, Mass., will perforate, slit and score on all makes of cylinder and job cylinder printing presses. The operation is directly on the cylinder packing without the use of bands. Sponsor states the device can be installed and made ready to operate in 2 min.

Two units are available—Model V-1 designed for use on Miehle Vertical Presses; the Model C-2 for use on all makes of cylinder presses.



In the top illustration is shown the Model C-2 Preferred Bandless Press Perforator for attachment to any make of cylinder and job cylinder press. In lower illustration is shown the Model V-1 which is designed for use on all models of the Miehle Vertical Press. The device perforates, slits and scores; micrometer adjustment of blade made by knurled thumb screw and lock nut.

Maker states the device slits, scores or perforates close to or through printed areas while the press is printing. Is said to work on all paper from onion skin up to lightweight card.

The hardened steel blade is placed between two circular abutment disks which limits the extent of penetration of the blade against the paper. Perforating blades available from 2 to 12 slots per in.

The knurled thumb screws and micrometer side adjustment are said to permit fast installation and accurate register.

Filters and Lens Catalog

A KODAK technical catalog containing data on the applications, available forms and prices of Kodak Wratten Filters and optical attachments, has been issued by Eastman Kodak Co., Rochester 4, N. Y. Filters for both still and cine work are included in the catalog. Information on the care of Kodak Wratten Filters, aids in the use of filters, filter factors for Kodak films and plates, and a classification of Kodak films and plates is also included. Copies are available from Kodak dealers at 50 cents each.

Matrix Reference Process

DRI-STAIN is a process for treating the reference edges of line-composing machine matrices to cause the reference characters to be readily visible to the operator. Linotape Products Co., Denver, Colo., is sponsor of the process. It has been announced that Dr. William Heinecke, New York, has applied for patents on the method. According to sponsor, treatment of matrices can be done by the printer himself.

FREE booklet gives full story on TELETYPESETTER
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Tells how Teletypesetter increases type production of straight matter by 50% to 100%

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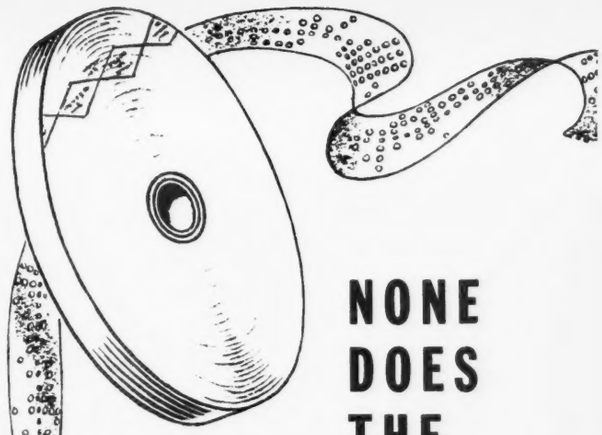

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"To me as a pressman, Blatchford's the buy because

...it stands up under long runs ...it delivers clean, crisp impressions, sheet after sheet after sheet."

Yes, any way you look at it, Blatchford Metal gives a standout performance on the press. And, if you want to know why it works so well . . .

First, look at the top quality lead, tin, and antimony used. Metal resources and laboratory facilities without parallel in the field are the answer.

Second, look at the precise formulation employed. Accuracy and precision are Blatchford watchwords.

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Take the judgment of men who know metal—your own craftsmen: buy Blatchford.

Keep your metal stock always up to par—use the famous *Blatchford Metal Maintenance Service.* Write for details.

NATIONAL LEAD COMPANY. *Atlanta, Baltimore, Chicago, Cincinnati, Cleveland, Pittsburgh, St. Louis; National Lead Co. of Mass., Boston; E. W. Blatchford Co., New York; Morris P. Kirk & Son, Inc., Los Angeles; American Lead Corp., Indianapolis.*

Blatchford . . .

the NATIONAL name for dependable metal

Makers of the famous Blatchford "Honeycomb" Base

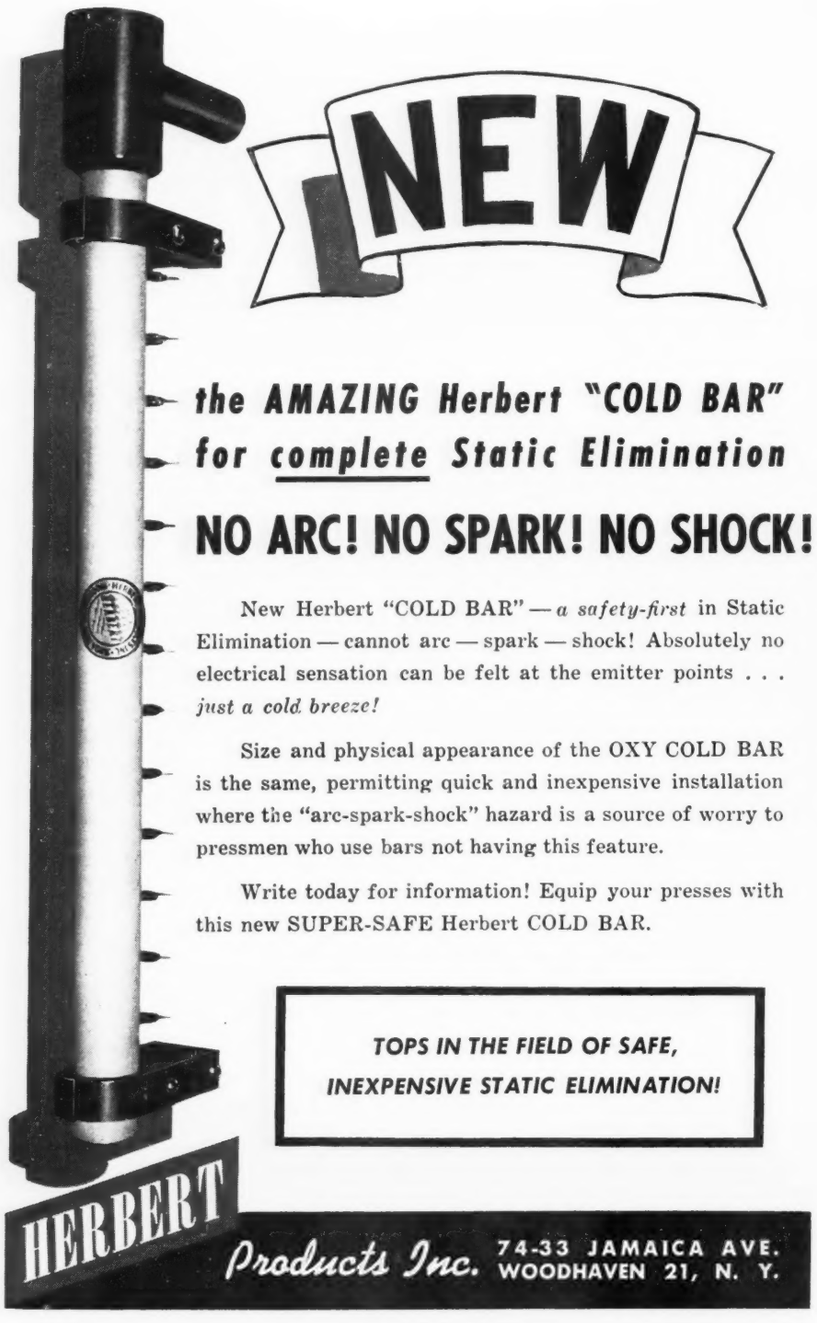
Waste Hamper

AN all-fibre waste hamper, with steel reinforced top and bottom edges and hand-holes for lifting, has been announced by William Bal Corp., 2 Johnson St., Newark 5, N. J. The hamper is designed specifically for use where space is important, like washrooms, corridors or aisles. Standard length, width and depth is 20 in. by 10½ in. by 30 in.

Please take a look at your address on the wrapper in which *Printing Equipment Engineer* is sent to you at your place of employment. If it isn't correct, please tell us about it on a postcard.

Linotype Parts Catalog

A LOOSE leaf catalog of parts for line-composing machines and composing room equipment, has been issued by Linotype Parts Co., Inc., 2 S. Main St., S. Hackensack, N. J. The list of parts and equipment divided into ten general divisions, with a cross index and price list at the back of the book. The catalog contains numerous illustrations of the parts and equipment, as well as a brief description of each item. Specifications are also listed. The new pages of the catalog are available to all holders of previous catalogs, and the complete new catalog is available to those who do not now possess one.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the AMAZING Herbert "COLD BAR"
for complete Static Elimination
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New Herbert "COLD BAR" — a safety-first in Static Elimination — cannot arc — spark — shock! Absolutely no electrical sensation can be felt at the emitter points . . . just a cold breeze!
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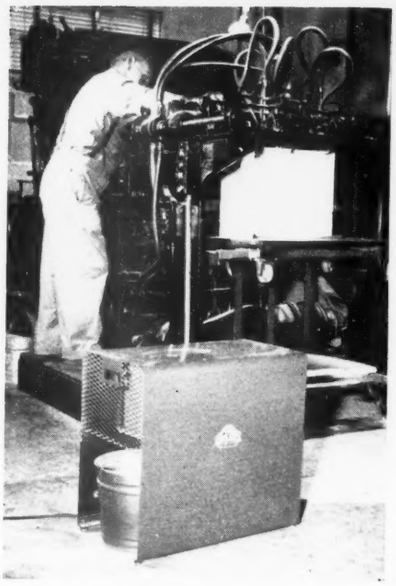


Oasis Air Drier — The Ebco Mfg. Co., 401 W. Town St., Columbus 8, O., states the Oasis Air Drier removes excessive moisture from the air within the plant. Pictured above is one of 16 air driers recently installed in the plant of the Warner P. Simpson Co., Columbus, O. Pressman Ross Nichols is at work on the press. It is claimed that the relative humidity can be held to 60 per cent or less with the Oasis Air Driers.

Corrosion-Resistant Paint

DESCRIPTIVE material relating to Tygon Corrosion-Resistant Paint is presented in a 12 page booklet available from U. S. Stoneware Co., P. O. Box 350, Akron 9, O. According to the booklet, two types of Tygon Paint are available: Series K for protection against fume corrosion or relatively mild corrosive conditions; and Series TP for protection under severe corrosive conditions, particularly when the protected surface will be in continuous contact with the corrosive element. The chemical resistance characteristics of Tygon Paint are included in the three-color booklet in table form.

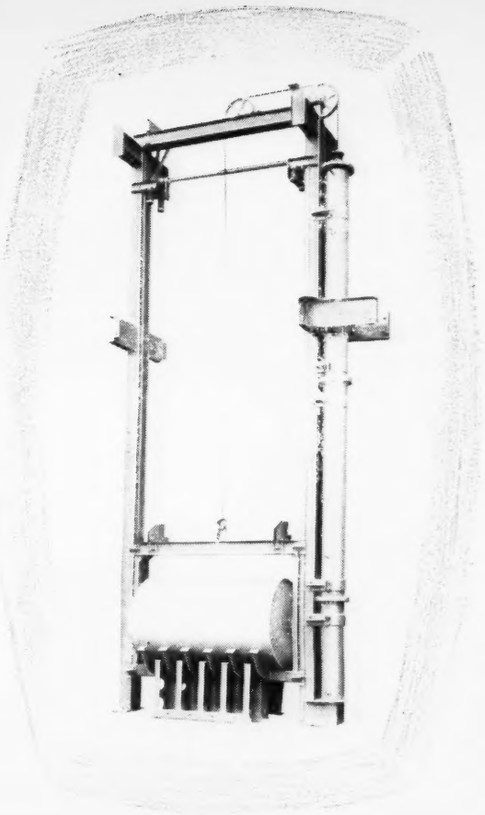
Pacific Mechanical Conference

An exhibit of newspaper equipment and supplies will be held as part of the Pacific Newspaper Mechanical Conference's 1951 meeting being held at the Biltmore Hotel, Los Angeles, early in May. Arrangements for the equipment show are being handled by Western Printer & Lithographer, Suite 419, 3923 W. 6th St., Los Angeles 5, Calif.

120 Screen Plastic Cuts

Electronically engraved 120 line screen halftones have been used for the first time in a recent issue of the publication, *Magazine Industry*, a trade magazine published by the Deposit Courier Co. of Deposit-on-the-Delaware, N. Y. The halftone cuts were made on a Fairchild Photo-Electric Engraver.

BUILT FOR A BETTER LET-DOWN



Damage comes easy to a roll of newsprint—pretty hard to estimate just how many feet of paper have been wasted.

A Gifford-Wood Pneumatic Drop eliminates this "faulty-handling" spoilage. You simply feed in a roll and flip the latch. Hinged loading fingers cradle the roll securely, lower it, and discharge it to press or storage room without the slightest possibility of damage. Risk of accidents is reduced. Handling costs are lowered. Stock moves easily and swiftly, with minimum effort.

ALSO AVAILABLE ELECTRICALLY-OPERATED FOR RAISING AS WELL AS LOWERING ROLLS

G-W conveyor and elevator systems are also available for mechanically moving stereos, magazines, mail sacks, bundles, etc., to any part of your plant. Call a G-W engineer. He will, without obligation, recommend the proper handling system to meet your special requirements.

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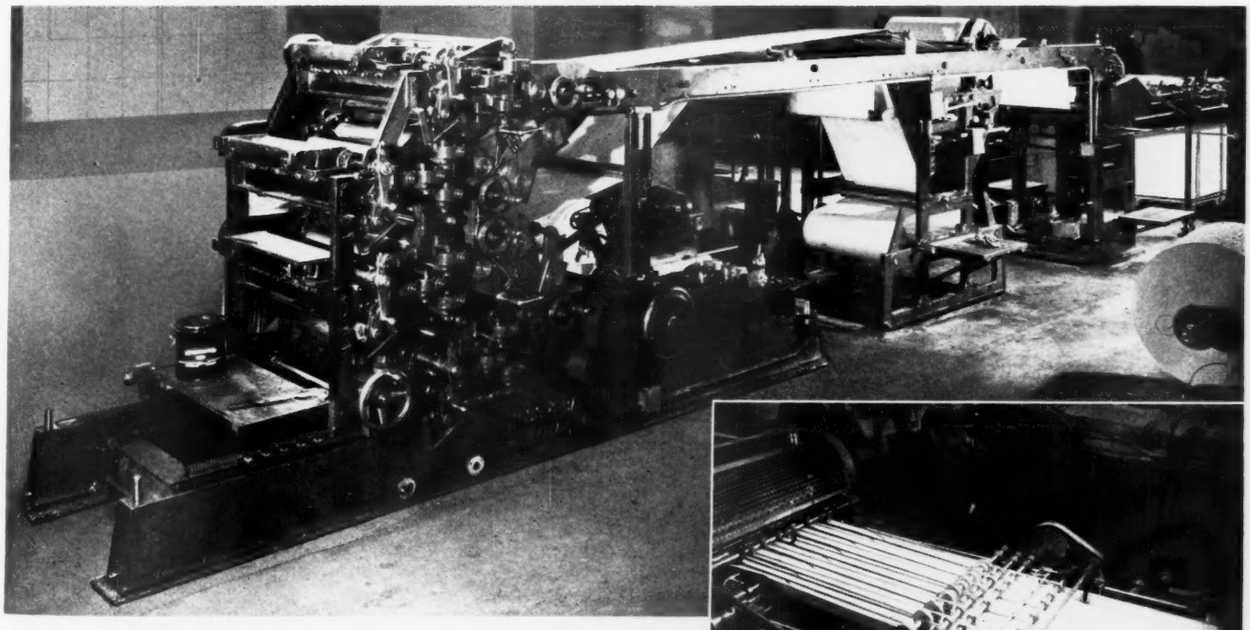

The President

the Sales Manager and the Superintendent of Printing, all like Hess & Barker's 4 to 8 color letterpress because it is a good profit maker. It reduces sales resistance to the minimum and cuts production costs right to the bone.

Hess & Barker's 4 to 8 Color Rotary Letterpress feeds from a roll, prints up to 4 colors on each side, 8 colors, once through the press, and delivers up to 10,000 sheets per hour or if desired a perfect web rewind 30" wide. Sheet size: length, 19" to 32"; width, 30".

For free samples of fine color printing, all printed on Hess & Barker's 4 to 8 Color Letterpress, telephone or write—

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Printing Press and Equipment Manufacturers

212-22 South Darien Street, Philadelphia 7, Pa.

Telephone, PEnnypacker 5-4070

Carnegie Plant Surveys

A survey involving various aspects of printing plant management has been made and presented in tabulated form by students of the Department of Printing Management, Carnegie Institute of Technology. The survey was edited and produced in a 28 page booklet by Philip C. Smith and Kenneth A. Swanson, Carnegie printing students. Information obtained from 36 plants surveyed is divided into five general categories, dependent upon the annual gross sales volume of the plant.

The questions are divided into the following classifications: general plant information, personnel problems, preliminary plans, safety, production management, salesmen, credit and collections, printing trade customs, budgeting, financing and legal aspects. Lists of the major equipment of some of the plants are included to show what equipment plants of various sizes are using.

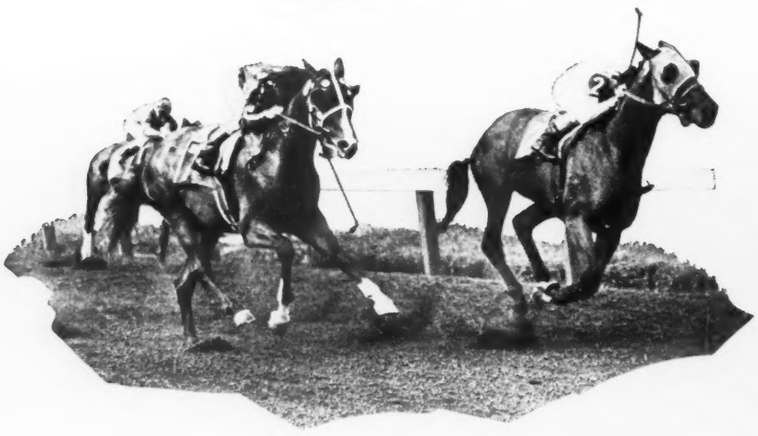
Kemart Branch Offices

Kemart Corporation has opened branch offices in New York and Michigan, according to Frank P. Adams, President of the firm. The New York office, at 52 Vanderbilt Ave., New York, N. Y., will be under the management of G. O. Berry. The Michigan office, at 108 Kalamazoo St., Marshall (near Battle Creek), will be managed by Lyle Youngdahl.

Paper Moves by Water

A barge, capable of transporting 2000 T. of paper stock, has recently been completed by the Dravo Corporation for transporting paper for *Life* magazine from the mill of the St. Regis Paper Co. at Bucksport, Me. The paper will be moved down the Atlantic coast, up the Hudson River, through the New York State Barge Canal and over the Great Lakes to Chicago. Use of the barge will hold the number of handlings of the paper rolls down to two.

IT'S THE FINISH THAT COUNTS!



FINISHES count on "the track" . . . and in the engraving shop.

Zomo Electric Zinc, A-Z Alloy and Zomag, with their finer Machine Cut Finish, the modern standard for superior zinc finishing, lead the field in providing the engraver with a clean, smooth surface, free from ridges or hidden scratches, and with just the right tooth to hold the top.

For champions that pay off in the highest quality engravings, when ordering metal from your supply house, specify Zomo, the all around zinc plate . . . A-Z Alloy for long printing runs or heavy mat work . . . and Zomag (Dowmetal), the only magnesium alloy made specially for photoengraving.

ZOMO ELECTRIC ZINC • A-Z ELECTRIC ALLOY • ZOMAG

Selsyn Motors

(Continued from Page 88)

hand should stop at any other position around the dial than on one of the white radial lines, the machine will need immediate attention because the driving clutch is slipping due to some interference or jam which could result in a burned-out motor.

Mr. Stanzione states that this device has saved him many steps and has made it possible for him to do more maintenance and repair work at the bench and still keep the down time of the Teletypesetter-operated line-casting machine at a minimum.

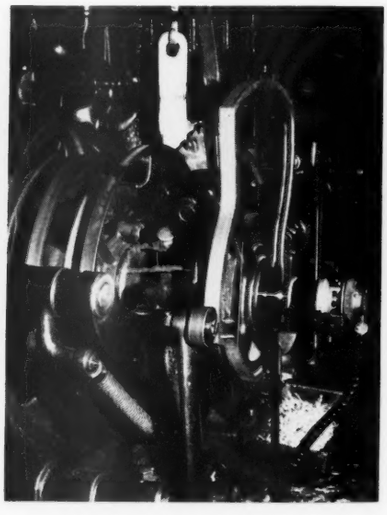


Fig. 1.—View of selsyn motor attached to a Teletypesetter-operated Linotype in plant of the *Pennsylvania Grit*. The motor rotates with the main cam shaft and is connected to another selsyn motor at the machinist's bench some distance away. Thus the machinist is able to work on bench repairs and still be made aware when the machine has stopped from any one of several causes.

Selsyn motors suitable for this device can be purchased at stores selling war surplus radio and electronics equipment. In this instance, the motors are 2½ in. diam. and 4 in. long, operating on 110 v., a.c.

FLAT and PRE-SHRINK SCORCHER

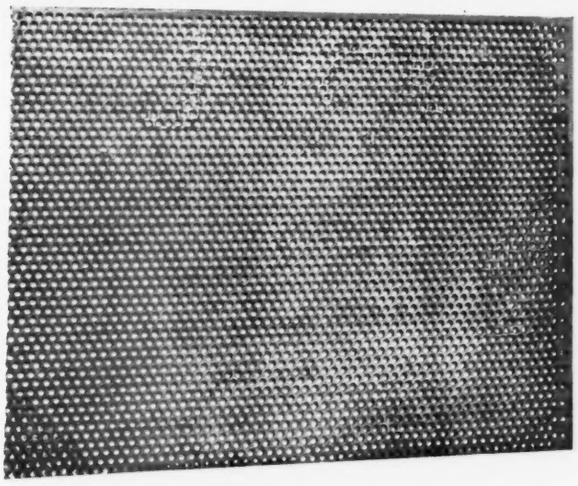
Featuring

SCORCHING TIMER
PRE-SHRINK TIMER
WELDED STEEL BODY
PRE-SHRINK ATTACHMENT
AUTOMATIC HEAT CONTROL
HINGED INSTRUMENT PANEL
ANGLE IRON RE-INFORCEMENTS

and the only machine on the market with perforated steel cover as pictured to the right.

Prices, f.o.b. Lynnfield, Mass.

Model "FC" without timer.....AC $200
Model "FS" with one timer....AC $225
Model "FSP" with two timers..AC $250
D. C. Models.....$25 Extra



Showing perforated one piece steel cover—
Cover lays perfectly flat and will not buckle.

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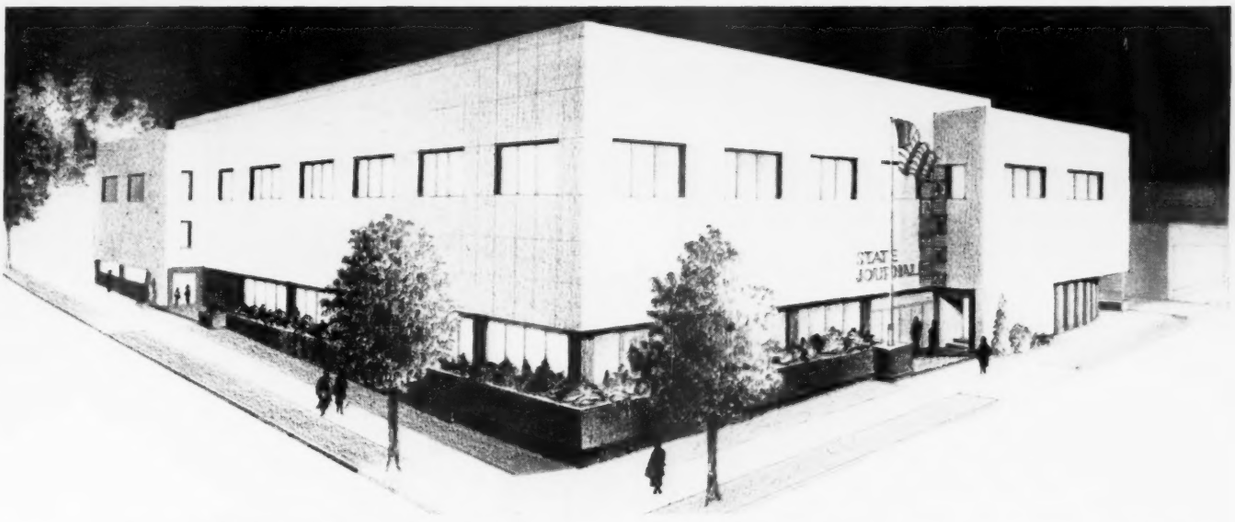

the *TIME TO TALK* about printing plant planning

There are two times when a frank discussion of printing plant planning is advantageous. The first of these is when production costs become unreasonably high; the second time for discussion is when a new building is under contemplation. In either case, it is the sensible and foresighted move to call in a representative of Morton Pereira & Associates who will be glad to give you the benefit of 35 years' experience in designing new plants, modernizing, preparing surveys and consultations. Your inquiry is respectfully solicited.

MORTON L. PEREIRA & ASSOCIATES

ARCHITECTS AND ENGINEERS

100 West Monroe Bldg. • Chicago 3, Illinois

Architect's conception of new building for the Elyria (O.) *Chronicle-Telegram*. The structure is scheduled to be completed in the spring of 1951.

New Plant for Elyria (O.) Newspaper

IT IS anticipated that the Elyria (O.) *Chronicle-Telegram* will occupy its projected new home by late spring 1951. The structure of cream colored brick and steel, according to Architect Robert W. Dickerson, will be basically a streamlined, workable plant of good proportions, simple but beautiful in design. The building will have a three-street exposure with driveway, parking and truck area on the fourth exposure. It will be of one-story construction with two-story section. The upper section will be available for rental purposes until such time as the space is needed by the newspaper.

Acoustical treatment will diminish noise. Floors will be of Tufftex composition tile. Plastic wall coverings will be used. Rolling steel doors, newest type of insulation, modern washrooms, fireproofing materials, metal partitions, and latest type plumbing, lighting and heating will be used.

The offices and mechanical departments will be located on the ground floor. The basement will be devoted to a spacious assembly room, kitchenette, newsprint storage and other facilities.

The 48 page, three-unit Duplex press will be located adjacent to observation windows so the public can watch it in operation.

J. Clare George is Editor, C. R. Stokley is Business Mgr., Otto Schoeffle is Comptroller of the *Chronicle-Telegram*. General contractor for the building was awarded to T. J. Hume Co. Robert W. Dickerson is the Architect.

Duplicates 1899 Report

To commemorate a half century of progress, National Lead Co. has reproduced a facsimile of the annual report issued by the company in 1899. The facsimile report was sent to stockholders with the company's 1949 report. To duplicate the typographic feeling of the old report, the William Barton Marsh Co. of New York who reproduced the job, unearthed in an old-time printshop one of the first fonts of Linotype matrices ever cut by the Mergenthaler Linotype Co. The reproduction of the 50 year old report purposely contains typographical errors, broken letters, uneven spacing and heads and variations in color occurring in the original. The one element that it was impossible to simulate accurately was the paper.

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ACCESSORIES—PARTS—REBUILDING

WE CARRY

a complete line of accessories for all line composing machines. Your shipment will be made the same day your order is received.

Write for our PARTS CATALOG

ORIGINATORS

of the Half and Half Magazine.

Brass bottom plate for durability — Aluminum Alloy top plate for strength and lightness.

OUR EXPERIENCED

personnel and up-to-date equipment have gained us an enviable reputation as rebuilders of line casting machinery. We repair and rebuild to manufacturer's specifications. PROMPT SERVICE.

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MONTGOMERY CO., INC.
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Money lost through spoilage and stoppages due to static in folders, cutters and presses is unnecessary. This costly static can be eliminated . . . safely, efficiently, inexpensively . . . by the SIMCO "*Midget*". Send for illustrated folder "PE-7" today, for full information!

SEE THE SIMCO "MIDGET" STATIC ELIMINATOR OPERATING ON THE WEB PRESS, ATF BOOTH, GRAPHIC ARTS SHOW.

the SIMCO company
920 Master St., Philadelphia 22, Pa.

ECONOMY LIFTERS

As used in the printing industry for:

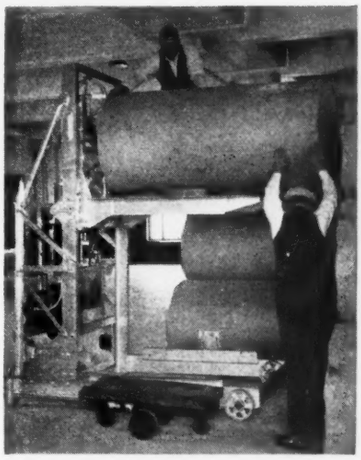
ROLL HANDLING
(any size or weight)

SKID HANDLING

BOXES, FLAT PAPER

BALES, WASTE PAPER

CARTONS



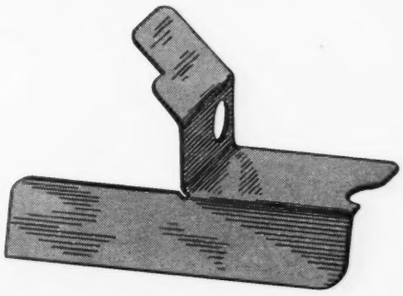
"Handling News Print Rolls"

Other lifters available with capacities of 500 to 5000 pounds. Any platform lift and size. Hand and electric powered hoist units.

ECONOMY ENGINEERING CO.
4501 W. Lake Ave. . . . Chicago 24, Illinois

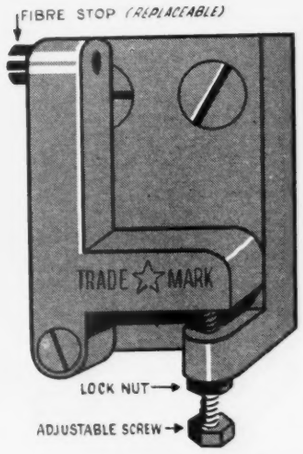
MORE NEW STAR PARTS TO IMPROVE LINOTYPE OPERATION

They add to an ever growing number of improvements engineered for Linotype and Intertype equipment by the Linotype Parts Company Inc.



The new Adjustable Assembler Slide Stop is a great improvement over the inclined stop. It provides direct buffer action and eliminates ride up of the slide. This stops wear caused by excessive friction at point where brake shoe digs into slide. Space between Assembler Slide Finger and star wheel is now instantly and more easily adjustable and wear of replacable buffer can be taken up. Available for Linotype Machines only—

Part number D-54-A.

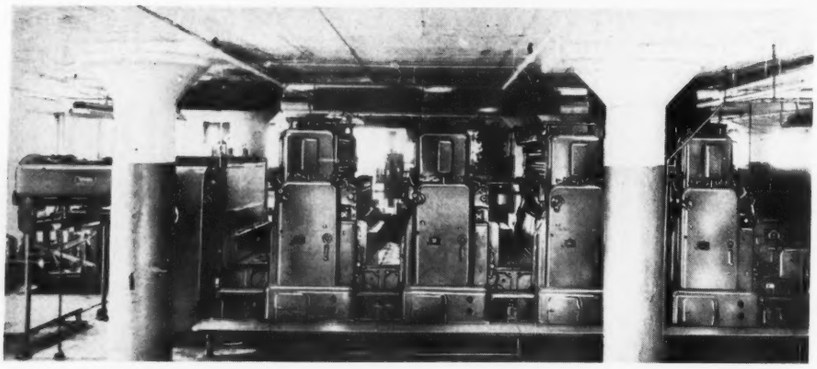


Another new item which can be installed in 5 minutes is the Griffith Clutch Guard . . . covering the bearing point to prevent accumulated chips from interfering with the smooth operation of the starting and stopping lever. For Linotype machines only—

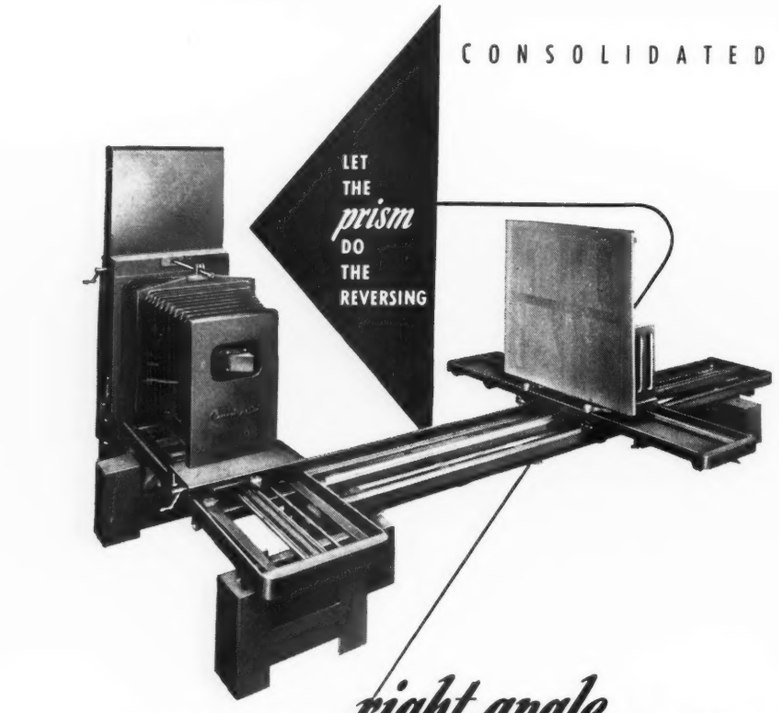
Part number M-42.

PRECISION
TRADE ★ MARK

LINOTYPE PARTS COMPANY
INCORPORATED
Factory and Main Office
SOUTH HACKENSACK, N. J.
Branch Office: 1327 BROADWAY, KANSAS CITY 6, MO.
CHICAGO • MINNEAPOLIS • DENVER • NEW YORK • BOSTON



Regensteiner Installs Miehle Press—Installation of a new Miehle 76 Four-Color Offset Press was recently completed at the Chicago plant of the Regensteiner Corporation.



WITH A CONSOLIDATED *right angle* PRECISION

DARK ROOM CAMERA

Save the time and cost it takes for "flopping" . . . eliminate the dangers of stripping emulsion in color work . . . by using a Consolidated Right-Angle Precision Dark Room Camera. Compare the advantages of this Consolidated Right-Angle Camera with prism with any other type of reversing camera or attachment made . . . for speed, simplicity of control and adjustment, range of work, and dependability. All controls are handled from either the darkroom or outside. All the many advantages of darkroom work can be yours with this right-angle prism camera. For better color work with absolute precision . . . much faster work at lowest cost . . . let us give you complete information concerning the Consolidated Right-Angle Precision Darkroom Camera.

IT'S A FACT

To the best of our knowledge this is the first successful right-angle precision darkroom camera ever to be produced . . . successful from the standpoint of dependable, accurate, trouble-free operation. Consolidated cameras of this type were first sold and delivered about two years ago. In each instance, the first camera received by each customer was given months of critical use. In each instance, after such trial use, additional, similar camera equipment was ordered from Consolidated. This must be proof that the Consolidated camera can do the job!

Consolidated PHOTO ENGRAVERS AND LITHOGRAPHERS EQUIPMENT CO.

2155 WEST WABANSIA AVENUE, CHICAGO 47, ILLINOIS • 205 WEST 19TH STREET, NEW YORK 11, NEW YORK

Golden Anniversary

With the Tuesday, August 1 regular editions of the Port Huron (Mich.) *Times-Herald* was included a special 24 page tabloid section commemorating the fiftieth anniversary of that paper. The section was filled with historical material about the personalities responsible for progress of the paper. Also of interest were a number of illustrated pages showing how the *Times-Herald* is put together. All of the editorial business and mechanical departments are illustrated and described. Informal portraits are shown of Frank E. Marengo, Mechanical Supt.; Ambrose G. Alarie, Composing Room Supt.; William F. Schrikel, Stereo Supt.; Charles G. Peterson, Pressroom Supt., and other mechanical executives responsible for production. The *Times-Herald* is a modern newspaper, having wire services, Fairchild engraver and other appurtenances incidental to the up-to-date plant.

The *Times-Herald* is proud that 600 years on the job have been devoted to that paper's service by 20 employees. Among others having extended service records are Mr. Marengo (41 years), Millard E. Shirts of the pressroom (40 years), Mr. Alarie (30 years), and Charles Cooper, mailing foreman (37 years).

Color Etcher Uses Liquid Mask Material

The etchers in the color photoengraving department of the Chicago *Tribune* are using a liquid masking material in place of the ink usually employed for that purpose in etching operations. The ink was developed by a Chicago concern working in collaboration with Pete De Sario, an etcher in the *Tribune* color engraving department and with the encouragement of Production Mgr. John Park and Color Engraving Supt. Pat Bresnahan. It is related that De Sario saw a liquid masking tape being used and he wondered if it could be used as an acid resist on engraving jobs.

It is stated in *The Trib*, (*The Chicago Tribune* house organ) that the material speeds up production from one to four hours per day per etcher.

Instead of using the acid-Resisting ink, it is reported in *The Trib*, which formerly was painted in the plate to protect a certain area while another part of the plate was etched, the liquid masking material now is used.

For example, on a combination plate with halftones and line work, the etcher paints out the line work with the liquid to protect it while he is etching a halftone. Previously, the etcher covered the line work with the acid-resisting ink which was washed off when the halftones were etched completely. The etcher then repainted the halftones to prepare the plate for deep etching.

Now, when the etcher is through etching one area, instead of having to wash off the ink formerly used, he peels off the liquid covering in one piece, leaving the plate ready to be deep-etched.

LET'S GET ACQUAINTED OFFER

September and October only

Trimmers for the following saw machines at reduced prices:

Miller, Cost Cutter, ATF, Nolan, C&G Morrison, Turner, BB&S, WNU, Pioneer-Toledo and many others.

Regular price	(3) $1.80 now	**$1.20**
Hammond Glider	(3) 4.20 now	**3.50**
Ben Franklin	(3) 2.50 now	**1.75**

Oversize brass worms for Miller pica guages, were $2.50 now **$2.00.**

Parts for all saw machines. Fix 'em up for the coming rush.

Saw sharpening for any department 75c each. We pay **return postage** and guarantee satisfaction.

Book-10 sharpening coupons $7.00

We sharpen all items used by the Graphic Arts Industry.

Write for our mailing carton and "free" saw proposition—it will pay.

NATIONAL SAW SHARPENING CO.

316 E. Ohio St. Indianapolis, Ind.

Local distributors for Imperial Type Metal and products.

Ticket printers who want versatility, and high production will investigate the

ROLCA

high-speed roll-ticket press

Built for rugged, continuous performance where high speed and volume production are required. Prints tickets in several sizes, maximum ticket length 4½ inches. Operations include numbering, perforation, back printing, delivery in rolls, singles or zig zag. Imported and installed by

Amsterdam Continental

TYPES AND GRAPHIC EQUIPMENT INC.

39 Pearl Street, New York 4, N. Y.

Exhibitor: Graphic Arts Exposition, Booths 144-147

This Ad Set in Libra, Egmont Family and Rondo

TAKE A LESSON FROM THE LARK...

The Lark is a smart bird that knows a good meadow when he sees one! He'll search from morn 'til night... and when he finds a meadow that's got **everything he's looking for**... he stays there. **His** worries are over.

Your worries about replenishing and replacing supplies and equipment for newspaper printing production can easily be over, too. If what **you're** looking for are good, tested products... fast, dependable service... consistent savings year after year, then your search is over! TRY EASTERN FOR YOUR NEXT ORDER.

Here are just a few of the hundreds of items listed in the latest EASTERN Catalog:

PLATE-TAK Super-Thin Cut Mounting Tape

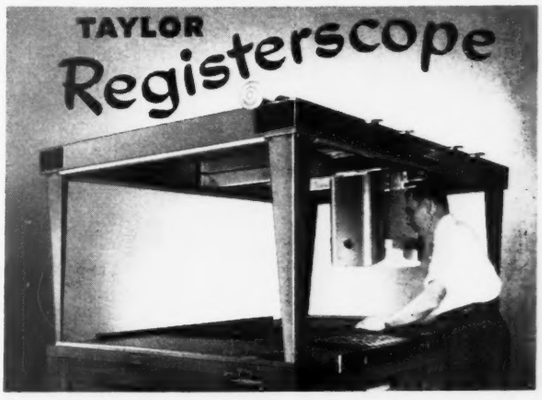
TRU-MOLD Cork Molding Blanket

FLECTO Gummed Backing Felt
(Individually Packed 5 Sheets per Bundle)

EASTERN FOR ECONOMY

EASTERN NEWSPAPER SUPPLY, INC.
9603 Northern Boulevard, Corona, L. I., New York

Take this man's place at the CHICAGO SHOW . . . use the



Want to beat your own best time making up a form to register? You'll do just that when you visit the Taylor Machine Company Booth No. 380 at the Exposition. The Registerscope will be on display together with form material for *you* to use. You won't need instruction, it's that simple to operate. We know from experience that the actual use of the Registerscope by one who knows form makeup is the most convincing proof of its ability to save time and money.

Mr. Arthur K. Taylor, the inventor of the Registerscope, and Mr. Richard R. Taylor will be on hand at Booth No. 380 during the show to give detailed information about the Registerscope and to show you how it can mean added profits for YOUR plant.

For complete description and prices, write today to:

TAYLOR MACHINE CO. Room 309, 210 Guilford Avenue, Baltimore 2, Md.

Conveyor-Like Composing Room

(Continued from Page 56)

At *12B* a large steel plate takes in the entire area, also covering *13* and *4* and *4*. A reinforcing support anchors the corner, thus giving clearance for rolling galley racks *4* to move freely in or out. This provides another huge stone area similar to *31* in Fig. 1 with all necessary materials convenient to the stone hand. This can be made to serve as an excellent breakup or dead table.

The question may arise in many minds why such large imposing tables are shown. The reason is that in this instance the management must utilize what it already possessed. At some later date, these will be replaced with new steel imposing tables to fit requirements.

With careful handling and leveling of the steel plate mentioned above, an inexpensive cylinder table can be improvised, since the forms are again finally planed down on the press bed.

Kill-out

When the form is returned to the imposing table after the press run is finished, the stonehand returns all pages to the rolling galley rack *4* and marks the word "Dead" upon the steel top of the rack with chalk. The rack then is rolled back to its compartment or stall in the base storage area awaiting orders from the foreman to break up the pages. A quick glance will indicate to the foreman how many dead jobs are waiting breakup.

When the Kill Dummy arrives in the composing room, the compositor rolls a small metal dump truck over to the rolling rack containing the pages to be broken up. If so instructed, he salvages running heads, borders, masthead, standing advertisements, etc. These are collected on a 12x18 galley and placed in the lower section of the suitable rack assigned to that publication to hold for the next issue. Otherwise, the rolling galley rack *4* is cleared of all matter and is ready to be released to the line-composing machine department when the next month's copy of the publication comes to the composing room.

The editorial holdover composition, which may vary considerably according to the type of magazine, is stored in galleys and placed on the galleys under tables *12* or *5* (Fig. 1). Each publication's holdover material is properly labeled for easy identification.

The lighting fixture shown in Fig. 5 over the page makeup unit, was designed especially for the purpose. In the fixture are four 96 in. G-E slim-line cold cathode tubes. A grille was fastened over the bottom of the reflector to diffuse the light and make it shadowless and glareless. The tubes furnish 160 foot candles. Brackets were designed for the makeup unit (Fig. 5) to permit positioning the fixture where wanted. The men report that after a regular workday their eyes are not fatigued.

The pattern of this installation is flexible. It can easily be designed to fit into any pattern of production requirements for various types of plants. It is engineered for simplicity and inexpensive installation. It can start at a basic minimum and expand as requirements demand. It organizes the composing room into controlled simplicity of material availability and product. This, in turn,

ALBANY
Printers Specialties

So! the Boss said

Whether your press is old or new it deserves the correct lubrication. Just any grease won't give you the satisfactory performance that ALBANY GREASE will.

ALBANY GREASE NO. 3 is made for grease cups. If your presses are equipt with pressure fittings we recommend ALBANY SOFT PRESSURE-GREASE.

For oil lubricated presses use ALBANY VISCOUS PRESS OIL. Does not drip or run off but clings to the metal. Do not confuse with the commonly used motor oil. It is twice as viscous and costs half as much.

The only way to experience trouble free operation as well as save time and money is use ALBANY PRINTER'S SPECIALTIES.

For your gears, cams and chain drives use ALBANY GEAR LUBRICANT NO. 93.

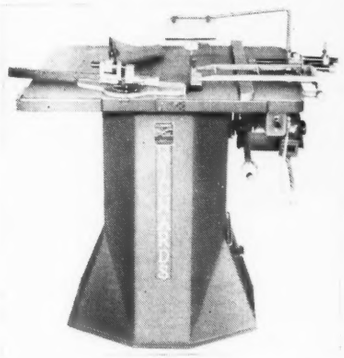
ALBANY GREASE is a tallow lubricant that has a controlled melting point (which feeds bearings as required).

Keep ALBANY LUBRICANTS on hand and you will meet that dead-line.

Send for Bulletin No. 10
1868 - 1950
But more modern than ever

ADAM COOK'S SONS, INC
Mfrs. of Albany Lubricating Products
LINDEN, NEW JERSEY

RICHARDS'
"Electromatic"
Efficiency Plus



For Stereotypers—Electrotypers —Photo Engravers.
PRECISION GAUGES
Instant change to SAW-TRIM
J. A. RICHARDS CO.
Kalamazoo, Michigan

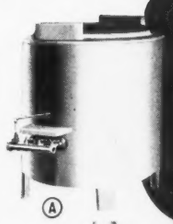
for *Better Plates! Better Printing!*

★ CENTRIFUGAL CASTING PROCESS for curved electrotypes
★ HYDRO-CASTER for flat electrotypes

These new methods of manufacturing electrotypes are available to you—for further information write

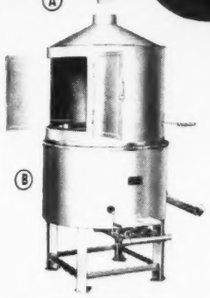
Printing Plate Supply Company

343 South Dearborn Street • Chicago 4, Illinois



'Surface' TYPE METAL REMELTING FURNACES

Ⓐ



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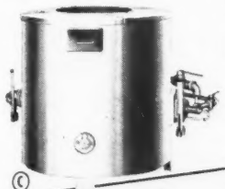


Ⓒ

'Surface' Gas-Fired Furnaces for type metal remelting are designed to provide the industry with an efficient, rapid melting furnace of long life.

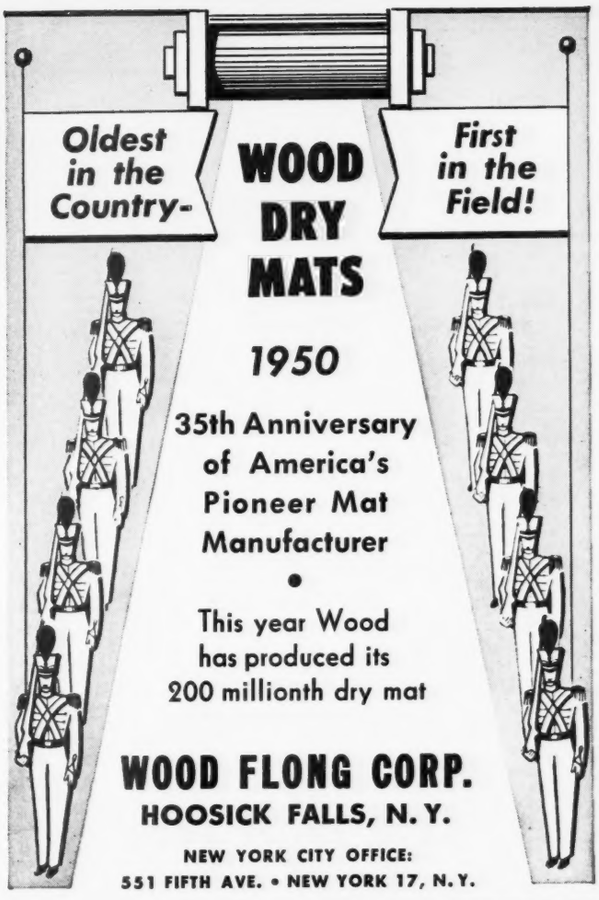
Ⓐ 'Surface' Type Metal Remelting Furnace equipped with Atmospheric Burner and bottom outlet. Available in capacities up to 5000 pounds of metal.

Ⓑ Same furnace as A equipped with hood.

Ⓒ 'Surface' Type Metal Remelting Furnace equipped with Pressure Burner. Standard models available with capacities up to 3200 lbs. of metal.

Write for Bulletin SC-130-A and Specification SV-49

SURFACE COMBUSTION CORPORATION • TOLEDO 1, OHIO


Oldest in the Country-
WOOD DRY MATS
First in the Field!
1950
35th Anniversary of America's Pioneer Mat Manufacturer
•
This year Wood has produced its 200 millionth dry mat
WOOD FLONG CORP.
HOOSICK FALLS, N. Y.
NEW YORK CITY OFFICE:
551 FIFTH AVE. • NEW YORK 17, N.Y.

NOTICE!

WITH APOLOGIES

THE CONTINUED RISE IN THE COST of producing our press packing materials has reached the point where we find it impossible to further absorb the shock.

THEREFORE—IT IS WITH CONSIDERABLE RELUCTANCE that we find it necessary to announce that as of Sept. 15, 1950, prices on our complete line of Blankets and Tympan Materials will be raised **15%**.

AT THIS SAME TIME WE SHALL PUT INTO EFFECT a new pricing policy on our MONOCORK. **From Sept. 15, the price of any blanket—regardless of gauge, and within the sizes from 33 x 45 inches to 39 x 50 inches, will be $17.00.** Odd sizes or shapes will continue priced on area. We expect to arrange the same system for all types of material soon.

NEW ENGLAND NEWSPAPER SUPPLY CO.

164 FREMONT STREET
WORCESTER MASSACHUSETTS
BRANCHES: New York—Chicago—San Francisco—Tulsa

Color Printing Control

with

PHOTOVOLT Reflection Meter Mod. 610

A photoelectric instrument for color and tone measurements in press rooms... for color as well as solid and half-tone blacks ...for control of ink flow ... for standardization of ink color.

PORTABLE, RUGGED, SIMPLE TO OPERATE

Write for Bulletin No. 639 to

PHOTOVOLT CORP.
95 Madison Avenue New York 16, N. Y.

See it in operation!

The New 30x40--60

BAUMFOLDER

at the Graphic Arts Exposition in Chicago

The most versatile precision-built lifetime heavy-duty folder ever designed

★ FOUR parallel folds, *then*
★ FIVE parallels at right angles, *then*
★ FOUR parallel folds at right angles, *then*
★ TWO parallel folds

SELECTIVITY OF *FIFTEEN* FOLDING PLATES, any combination of which can be used for the UNUSUAL jobs . . . for instance map folding.

All other sizes will be shown with Suction Pile Feeds, Continuous Feeds, even Friction Feeds (on smaller models). See the BRAND NEW SENSATION FOLDER VALUE . . . the Baum JUNIOR 17x22 . . . five fold machine priced at HALF you'd expect to pay for precision built lightning speed folder of "TOMORROW".

RUSSELL ERNEST BAUM, INC.

615 CHESTNUT ST. PHILADELPHIA 6, PA.

Wonderful Girl-Friend EXCEPT Sometimes

Charlie is taking a sober second thought about his attachment to Irma. Pretty and jolly, no better companion could be found for a party or a picnic . . . But lately she has been showing tantrums that spoil evenings before they start. He is thinking that, for a life time pal, he wants a girl with an even temper . . . All of us appreciate consistency in a person or a product. Certified mats win and hold friends because they are good all the time—not just some of the time.

For dependable stereotyping, rely on Certified Mats **Certified DRY MAT**

CERTIFIED DRY MAT CORPORATION, 9 Rockefeller Plaza, Dept. M, New York 20, N. Y.

Composing Room Necessities

BOOTH'S Zink Cut Cement

The best . . . mounts cuts quicker, holds them tighter. Used to solidify type elements for standing ads. A top quality product.

Prices: 75c per tube, $6.00 per dozen in the United States

BOOTH'S RUBBER ROLLS

FOR Line Composing Machine Keyboards

Smoother, more responsive to keyboard cam action, higher resistance to glaze . . . with maximum cam gripping qualities, even diameter when properly applied to roll shaft. Try them.

Prices: $1.45 per pair
$7.75 per dozen

E. A. BOOTH RUBBER CO.

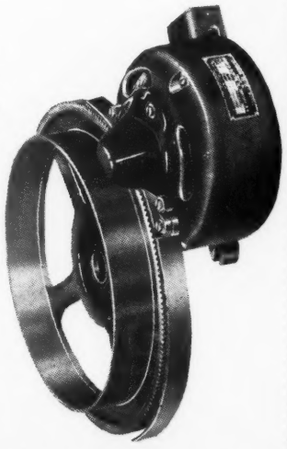
2855 Scarboro Road • Cleveland Heights, Ohio

WHAT ARE YOU PAYING FOR PRODUCTION?

If your linotype motor should fail today, what would happen to your deadline? Have you a spare on hand?

•

Cushman Offset Motors are available for immediate delivery, both ball bearing and sleeve type. Write for further information, include data from your old motor plate.



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CUSHMAN *Offset* MOTOR

PRECISION TRADE ★ MARK

LINOTYPE PARTS COMPANY

INCORPORATED

Factory and Main Office:
SOUTH HACKENSACK, N. J.

Branch Office: 1327 BROADWAY, KANSAS CITY 6, MO.
CHICAGO • MINNEAPOLIS • DENVER • NEW YORK • BOSTON

"Keep your presses rolling with Ohio Rollers"

Every printer knows a press isn't making money unless it is running and Duro-Major rollers allow more running time because they allow quicker change of colors. No special wash-up fluid or steel wool necessary.

OHIO ROLLER COMPANY

4408 Detroit Ave., Cleveland 13, Ohio **6333 E. Canfield (Rear), Detroit 7, Michigan**

re-orients the craftsmen's operations and mental attitude to one of high attainment with minimum effort. Fatigue and error are reduced; quality output and morale are increased.

Vibration Isolation

(Continued from Page 94)

The question may be fairly asked, from the practical standpoint, how is the forcing frequency determined? The forcing frequency is seldom one single frequency. The average machine is driven by a motor operating on 60 cy. current and in isolating the motor it is frequently found that the frequency of 60 and 120 cy. are stronger disturbances than the r.p.m. Some machines are equipped, for instance, with several blades or eccentric pieces which rotate or reciprocate, and thus the forcing frequency becomes a multiple of the number of reciprocating parts. When designing a mounting it is generally endeavored to ascertain the frequencies of the greatest disturbances and to work upon them rather than to attempt to attack every measurable frequency involved, since the mounting material takes care of reducing the transmissibility of higher frequencies than the natural.

There is another practical consideration which must not be overlooked. By referring again to Fig. 1 it will be seen that transmissibility decreases as the frequency ratio increases beyond 1.414. As the frequency ratio equals forcing frequency divided by natural frequency, and as natural frequency, according to Fig. 2, decreases as the load on the mounting increases, the frequency ratio will increase with the loading. It might seem, therefore, that it would be a good thing to increase the load on the mount-

Production and Mechanical Executives are invited to submit to the editor informally in a letter devices which have helped production in their plants.

AMERICA'S LEADING

NEWSPAPERS

USE

VULCAN

Press Blankets

Continuous research has made VULCAN Blankets the outstanding press packing in Newspaperdom.

Let us show you what VULCAN Press Blankets can do for you—under your own pressroom conditions.

"THE MARK OF QUALITY"

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RUBBER PRODUCTS, INC.

Formerly VULCAN PROOFING COMPANY

FIRST AVENUE & 58th STREET, BROOKLYN 20, N. Y.

Chicago Office: 333 North Michigan Avenue, Chicago 1, Illinois

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For printers of foresight

who are astute enough to anticipate

tomorrow's profits in today's production

RoFA

ROTARY RULING AND FOLDING MACHINE

Roll-fed, two side web ruling and cross-ruling, cover inserting, slitting and folding *all in one operation!* Compact, adaptable, precision built, geared to high production. Imported and installed by

Amsterdam Continental

TYPES AND GRAPHIC EQUIPMENT INC.

59 Pearl Street, New York 4, N. Y.

Exhibitor, Graphic Arts Exposition, Booths 144-147

This Ad Set in Rondo and Egmont Families

JOG FASTER and BETTER

PRIOR TO:
Printing
Cutting
Padding
Binding
Folding

WITH
SYNTRON
PAPER JOGGERS

PUNCHING
TRIMMING
OFFSETTING
ETC.

Save time and money aligning heavy board to onionskin.
Write for literature

SYNTRON CO.
577 Lexington, Homer City, Pa.

ings by tightening the floor bolts, where they are used.

Proper Bolt Tightness

This, however, is not the case. When compression of the pads is accomplished by bolts the latter constrain the motion of the pad. Even in cases where the bolts are provided with resilient rebound washers this constraint is still present, although less. By constraining the freedom of the pad to vibrate it is forced to adopt a higher natural frequency, thus defeating the end sought. In other words, bolts should be tightened just enough to provide proper stability and compress the resilient pads only sufficiently to avoid loose bolts.

The manufacturers of resilient mountings have studied the subject of the transmission of vibrations exhaustively and their engineers are competent to give authoritative advice on such problems, which is to be had for the asking. In view of the careful analysis which must be made in each case in order to obtain satisfactory results it would seem highly advisable to make use of this service.

Interesting Installations

An interesting installation which has given excellent results is to be found in the plant of a large metropolitan daily where Fabreeka resilient bushings about ¼ in. thick have been used around the pivot bars of steel bar springs on which the big presses are mounted. This method was employed to reduce the vibration transmitted to other parts of the building. Resilient mountings are also used successfully for high speed rotary presses to isolate high frequency vibration. However, presses having reciprocating arms must have considerable engineering work done on them to suppress the lateral motion before it is possible to realize much improvement by the use of pads under the machines.

Another manufacturer of resilient pads (The Felters Co., Boston) known as Unisorb has made installations under a variety of presses, including Miehle Vertical and Horizontal types, Seybold, Kluge, Cottrell-Clayborn, ATF Little Chief offset presses, etc. One of the illustrations shows Kluge presses at the printing plant of A. T. Howard Co., Boston, where the results have been beneficial. It is said that only the rythmical click of these presses operating at high speed is now audible, and that there has been no difficulty due to movement on the bases. Various other machines here are mounted in a similar manner. Another illustration shows a Miller Major Automatic press installed at the Rumford Press, Concord, N. H. When this concern moved its pressroom into a new building all of the presses were mounted on the Unisorb pads, with the result that 60% to 85% of the transmitted noise and vibration is absorbed.

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Huber Expansion

In a recent report to stockholders, H. W. Huber, President of the J. M. Huber Corp., announced that the firm will spend approx. $6 million this year for new plants and new oil and gas wells. A new furnace carbon black plant is being erected at Baytown, Tex. Annual capacity of the plant will be 30 million lbs. of HAF type carbon black.

Dunwoody Mechanical Conference—In this picture, L. I. Porter, Presswork Instructor of Dunwoody Industrial Institute, discusses results of good presswork to a group of newspaper mechanical men and editors. The "students" came from newspaper plants in Minnesota and Wisconsin. About 60 newspaper people came to the Sixth Annual Dunwoody Mechanical Conference held at the Institute on June 9 and 10. During the sessions the men were divided into small groups for instruction in composing, stereotype and presswork elementary instruction.

Vernon G. Eck, Machine Composition Instructor, discussed care and operation of composing machines. Francis O. Olson, Hand Composition Instructor, led the discussion on stereotype problems. Abel O. Norbeck, Minneapolis Branch Mgr. for Lewis Roberts, Inc., discussed ink problems for newspaper and commercial printing.

Mr. Olson later discussed *Copy Fitting—Accurate or Guess?* He analyzed the various systems available. He said many copy fitting systems are available but none are perfect. He prefers the character count system, stating that it is the most accurate.

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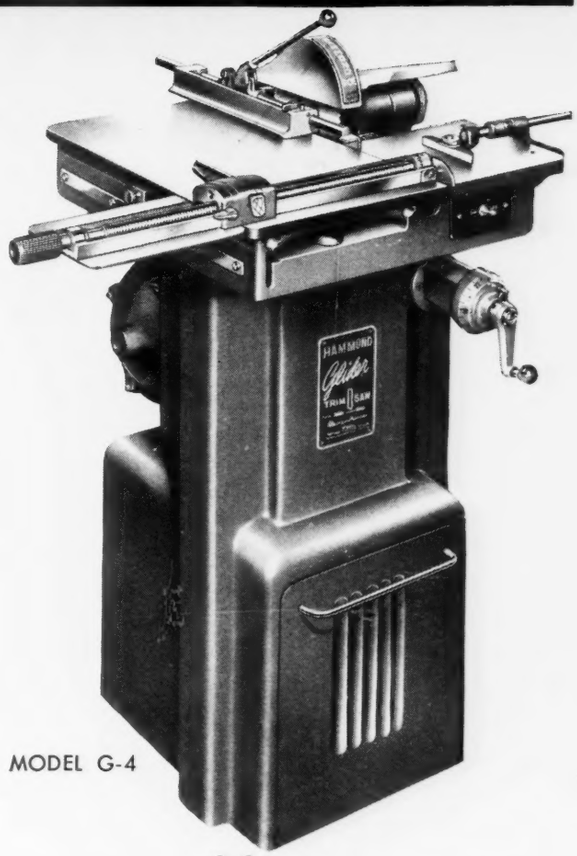

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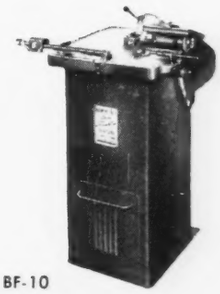

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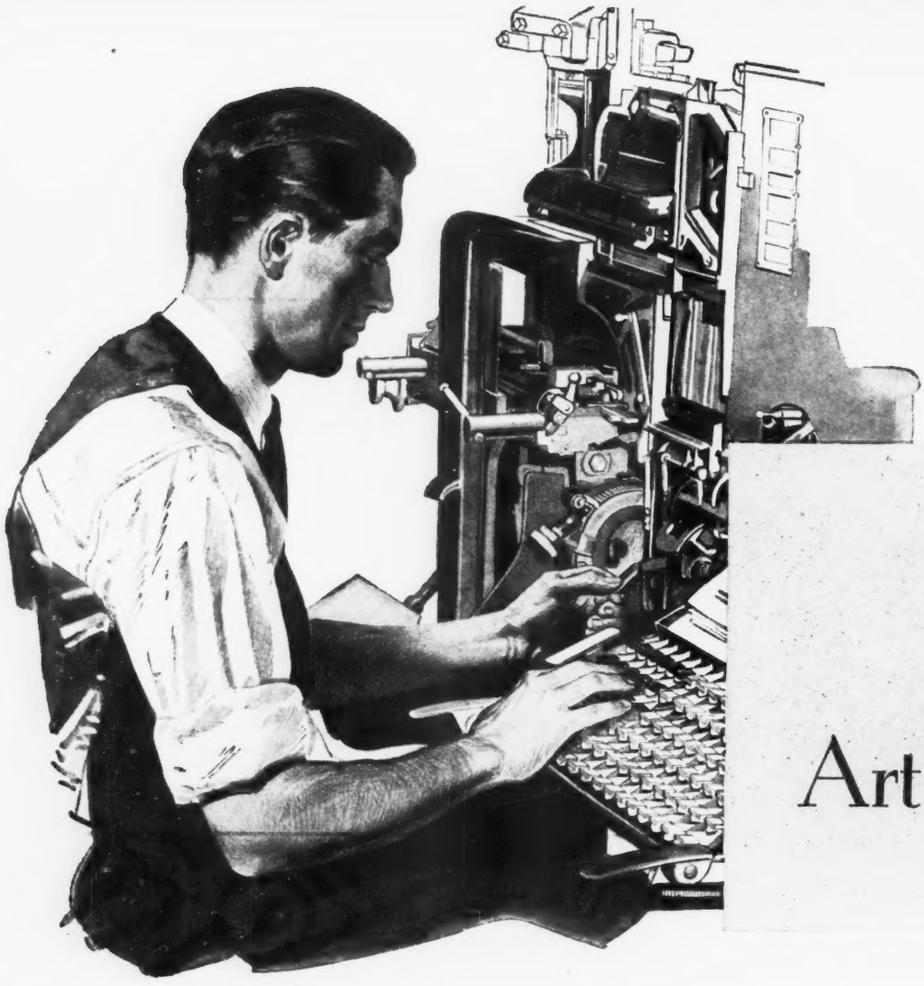

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